



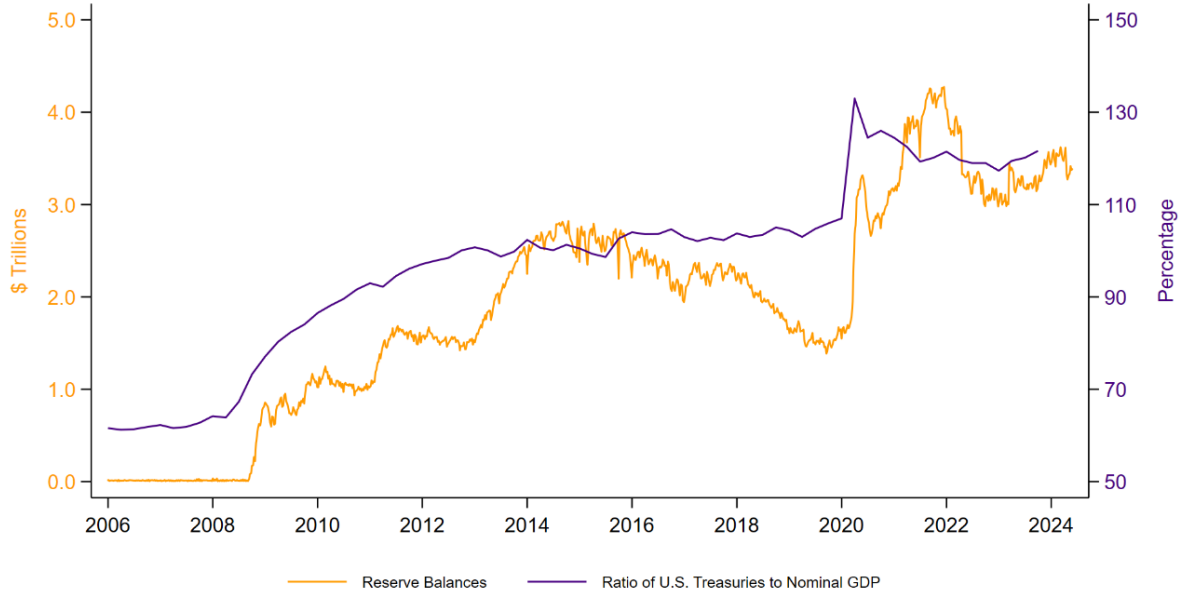
## Empty Promises: Revisiting the Reasons to Fix the Supplementary Leverage Ratio

Francisco Covas, Sarah Flowers and Brett Waxman | July 8, 2024

Leverage ratios by definition are risk-insensitive. Due to this nature, they were designed and intended as complementary backstops to risk-based capital requirements for banks, a safeguard that ensures a minimum level of capital even if risk-based requirements prove inadequate. Leverage ratios, such as the supplementary leverage ratio, were not designed to be binding constraints that frequently determine the amount of capital banks must hold.

When a leverage ratio becomes the binding constraint on a bank's capital allocation, it creates incentives that can distort a bank's behavior and undermine the efficiency of risk-based requirements. For example, a binding leverage ratio disincentivizes banks to act as dealers in low-risk assets, such as U.S. Treasury securities. This is because such activities become relatively expensive in terms of capital under a leverage ratio view, despite their low risk. Consequently, this could reduce liquidity in these important markets.

Figure 1: Heightened Pressures on Banks' Balance Sheets



Source: FRED, Federal Reserve Economic Data.

Several factors have contributed to the SLR becoming a more binding constraint over time for the largest banks. As Figure 1 illustrates, the growth of safe assets, particularly U.S. Treasury securities and deposits held at Federal Reserve Banks (or reserves), has considerably outpaced the growth of banks' intermediation capacity. It is important to note that while banks are not the only holders of Treasury securities, and shouldn't be, they play a crucial role in market intermediation.

Large fiscal deficits have fueled the growth in government debt, while the Fed's quantitative easing programs and changes to the Fed's monetary policy framework have substantially increased the long-term supply of reserves. Although the current level of deposits at Federal Reserve banks is only slightly higher than the level when the SLR rule was finalized in 2014, FOMC minutes from that time projected a decline in reserves to \$25 billion by 2021, a projection that did not materialize.<sup>1</sup>

In summary, the discrepancy between projected and actual reserve levels, combined with the growth in Treasury issuance, has put pressure on banks' balance sheets and their ability to provide liquidity in these markets.

Indeed, in April 2020, the Fed temporarily removed reserves and U.S. Treasuries from the denominator of the SLR calculation for banks.<sup>2</sup> This was done in response to the Fed's massive purchases of U.S.

<sup>1</sup> When the Federal Reserve adopted the eSLR in April 2014 at an open Board meeting, several Board members expressed concern about the unintended consequences of a binding leverage ratio. Staff noted that the impact of the SLR on bank balance sheets would likely be modest in part because "the level of reserve balances will be lower in the future as the size of the Federal Reserve's balance sheet is reduced. . . ." Federal Reserve Board, "Transcript of Open Board Meeting" at 8 and 15 (April 8, 2014), <https://www.federalreserve.gov/mediacenter/files/open-board-meeting-transcript-20140409.pdf>. See also footnote 5 on page 41 of the April 2014 "Report to the FOMC on Economic Conditions and Monetary Policy" part B, available at <https://www.federalreserve.gov/monetarypolicy/files/FOMC20140430tealbookb20140424.pdf>.

<sup>2</sup> In April 2020, the Federal Reserve Board allowed banks to deduct deposits held at Federal Reserve Banks ("reserve balances") and Treasury securities from the denominator of the SLR on a temporary basis. Press Release, "Federal Reserve Board announces temporary change to its supplementary leverage ratio rule to ease strains in the Treasury market resulting from the coronavirus and increase banking organizations' ability to provide credit to households and businesses," April 1, 2020. <https://www.federalreserve.gov/newsevents/pressreleases/bcreg20200401a.htm>.

Treasury securities in response to the market dysfunction caused by the COVID-19 pandemic. By removing cash and Treasuries from the SLR denominator, the Fed effectively lowered the amount of capital banks needed to hold against these assets, freeing up their balance sheets to support the Treasury market and the economy during the crisis. After the expiration of the temporary SLR relief in March 2021, the Fed stated that it would soon invite comments on several potential modifications to the SLR.<sup>3</sup> However, more than three years later, no public consultation has been launched.

GSIBs are also subject to an additional buffer on top of their SLR, called the enhanced supplementary leverage ratio or eSLR, which requires them to maintain a two percent buffer at the BHC level and a three percent buffer at the IDI level. In 2018, the Federal Reserve and the OCC consulted on a proposal that would have modified this eSLR and reduced the size of these buffers; however, the FDIC did not join in the proposal, which was never finalized.

Both Chair Jerome Powell and Vice Chair for Supervision Michael Barr have expressed support for adjusting the SLR to facilitate Treasury market intermediation. In September 2021, Chair Powell stated that the Federal Reserve was considering modifying the SLR without reducing overall capital requirements to ensure leverage ratios are not binding constraints, as this would encourage banks to take on more risk.<sup>4</sup> Similarly, in his July 2023 speech detailing his planned “holistic capital review,” Vice Chair for Supervision Barr noted that “[t]o the extent that there are problems with Treasury market intermediation in the future for which the eSLR might matter, the Board could consider an adjustment.”<sup>5</sup> However, in the same address, Barr further noted that “the eSLR generally will not act as the binding constraint at the holding company level, where Treasury market intermediation occurs” and that “if problems arise, [we] will consider appropriate policy responses.”

Under the banking agencies’ original Basel Endgame proposal, which includes a 19 percent increase in risk-based capital requirements for the largest banks, the eSLR would be less likely to act as a binding constraint, at least initially, before bank portfolio adjustments in response to its changes. However, recent [reports](#) suggest that the banking agencies are likely to make significant changes to the Basel proposal, which will materially increase the likelihood of binding leverage ratios, as we explain in more detail below.

## How Binding are Leverage Ratios?

One way to assess whether banks are bound more by risk-based capital or leverage requirements is to calculate how much capital banks hold above required minimums and buffers for both risk-based and leverage ratio requirements. The results are shown in Figure 2. Two sets of bars are presented: one measuring the amount of excess capital for risk-based requirements (Tier 1 capital) and the other for the eSLR, which is also measured using Tier 1 capital. The lower the bar, the more likely a bank is to be constrained by either the risk-based requirements or the leverage requirement. For example, in Figure 2

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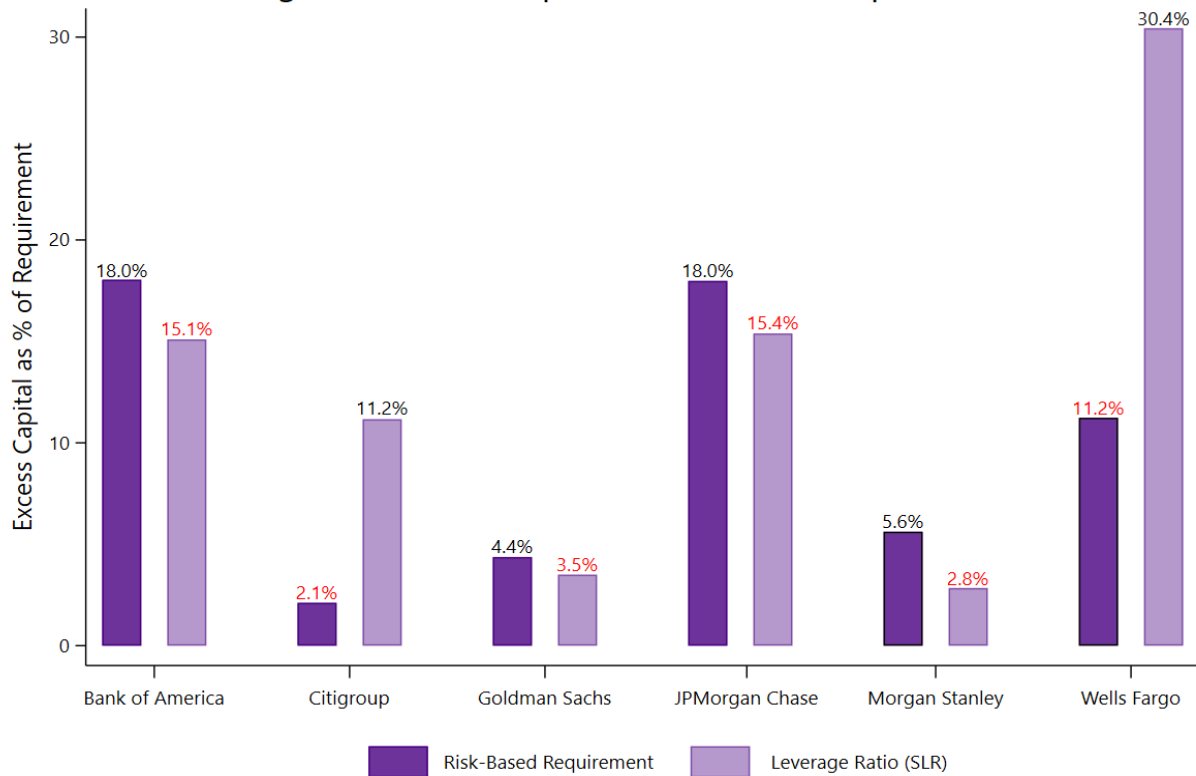
<sup>3</sup> A year later, with the Treasury market stabilized, the Federal Reserve allowed those changes to expire but announced in a press release that “[t]o ensure that the SLR—which was established in 2014 as an additional capital requirement—remains effective in an environment of higher reserves,” they “will soon be inviting comment on several potential SLR modifications.” Press Release, “Federal Reserve Board announces that the temporary change to its supplementary leverage ratio for bank holding companies will expire as scheduled on March 31,” March 19, 2021. <https://www.federalreserve.gov/newsevents/pressreleases/bcreg20210319a.htm>.

<sup>4</sup> United States Senate Committee on Banking, Housing, and Urban Affairs, “Full Committee Hearing: CARES Act Oversight of the Treasury and Federal Reserve: Supporting an Equitable Pandemic Recovery” (September 28, 2021), <https://www.banking.senate.gov/hearings/cares-act-oversight-of-the-treasury-and-federal-reserve-supporting-an-equitable-pandemic-recovery> (1:39:30)

<sup>5</sup> Michael Barr, “Holistic Capital Review,” Speech at the Bipartisan Policy Center (Jul. 10, 2023), available at <https://www.federalreserve.gov/newsevents/speech/barr20230710a.htm>.

below, JPMC is more likely to be constrained by the eSLR, which is the lower bar of the two measures. As illustrated below, among the largest banks, the eSLR is binding—not a backstop to risk-based requirements—for four out of the six largest banks.<sup>6</sup> Notably, these banks are also some of the most significant providers of intermediation in the Treasury market.

Figure 2: Excess Capital with Current Requirements



### Binding at the Bank Level

Banking organizations can be bound by leverage at the bank holding company level or at the level of their insured depository institutions. When bound at the bank level, Tier 1 leverage ratio requirements can adversely affect the efficient implementation of monetary policy by creating artificial constraints on deposit capacity. This implies a significant constraint on the ability of these institutions to accept customer deposits. As custody banks, STT and BK play an important role in facilitating financial flows, and constraints on their deposit capacity could impact the effectiveness of monetary policy and the allocation of capital. To maintain consistency across leverage ratios (and regardless of business models), the banking agencies should also consider appropriate adjustments to Tier 1 leverage ratios.<sup>7</sup>

In the initial Basel III proposal, the agencies estimate that changes to RWAs would increase binding CET1 capital requirements by 19 percent for holding companies in Categories I and II, six percent for domestic

<sup>6</sup> Since 2020, the two other GSIBs that function as custodial banks have not been constrained by the eSLR. This is because Section 402 of the Economic Growth, Regulatory Relief, and Consumer Protection Act permitted these banks to exclude deposits held at central banks from their eSLR calculation. The leverage ratio was not binding for WFC given the impact of the cap on asset size.

<sup>7</sup> It is important to note, however, that because the tier one leverage ratio was enshrined by section 171 of the Dodd-Frank Act, legislation could be required to make significant changes to this requirement.

holding companies in Categories III and IV, and 14 percent for intermediate holding companies of foreign banks in Categories III and IV. According to a recent [article](#), the Fed and other regulators are now moving towards a plan that would reduce the originally proposed capital increases by about half. However, based on the article, there seems to be disagreement between the Federal Reserve and the other two banking regulators (FDIC and OCC) regarding certain provisions in the proposed capital rules for large banks, specifically related to market risk. In addition, it is unclear how the finalization of the Federal Reserve's proposed changes to its GSIB surcharge framework, for which the SLR measure of total leverage exposure is a direct input, could affect that additional buffer on the risk-based requirements.<sup>8</sup>

The significant uncertainty surrounding the overall effect of the proposal on banks' capital requirements and how they will adjust their balance sheets in response to the finalized changes strongly suggests that leverage ratios will likely bind frequently for the same set of banks included in Figure 2. Furthermore, the level of risk-based requirements for these banks also fluctuates materially due to the excessive volatility in the year-over-year changes in their stress test results and the corresponding buffer.

For these reasons, it is crucial for the agencies to release a proposal with possible adjustments to leverage ratios to ensure that they remain as backstops to risk-based requirements. By doing so, the agencies can provide clarity and maintain the intended role of leverage ratios within the overall capital framework. If they fail to do so, banks will likely continue to be reluctant to make longer-term commitments of their balance sheets to relatively low-risk business lines, such as Treasury market intermediation.

## Potential Adjustments to Leverage Requirements

Regulators have several options available to address the issues related to leverage ratios, particularly the SLR and the eSLR. The primary goal of these adjustments is to restore the leverage ratios to their intended role as backstop requirements and mitigate the negative impact of a binding leverage requirement on banks' operations and the broader financial system.

In particular, "fixing" the SLR should remove disincentives to providing liquidity to the Treasury markets. Banks provide liquidity in two basic ways: (1) by buying Treasuries and (2) by providing repo financing (reverse repos) to others who wish to buy Treasuries.

A straightforward option to fix the SLR is to reduce the eSLR buffer by half, from 2 percent to 1 percent, while maintaining the existing 3 percent SLR minimum requirement. This simple adjustment would be applied fairly across all banks subject to eSLR requirements, helping to restore the backstop nature of the leverage ratios. Alternatively, setting the eSLR buffer equal to one-half of the Method 1 capital surcharge for U.S. GSIBs also works as a simple, straightforward and fairly applied solution.

Another approach is to exclude certain assets from the SLR denominator, such as reserve balances, U.S. Treasury securities, and all reverse repurchase agreements that finance U.S. Treasuries. Excluding reserve balances—as currently permitted for custody banks—would reduce the procyclicality in the SLR requirement, as the Federal Reserve tends to increase reserve balances during challenging economic

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<sup>8</sup> Regulatory Capital Rule: Risk-Based Capital Surcharges for Global Systemically Important Bank Holding Companies; Systemic Risk Report (FR Y-15), 88 Fed. Reg. 60385 (Sept. 1, 2023).

times. This exclusion would also improve the effectiveness of the SLR as a safeguard against errors in risk weight calibration, given that the correct risk weight for reserve balances is undeniably zero.

Another step would be to exclude U.S. Treasuries held in trading accounts. The rationale for excluding Treasuries in trading accounts is that, unlike Treasuries in investment account, they are subject to risk-based requirements, so there is no need for leverage-based backstops. Finally, it would be also useful to exclude Treasury reverse repos from the SLR. The rationale for excluding those is that the only risk is counterparty credit risk, which already is captured by a separate component of the SLR.

Regulators also need to make similar adjustments to the Tier 1 leverage ratio, with the exception of removing Treasury reverse repos. In contrast to the SLR, the Tier 1 leverage ratio does not have a separate component for counterparty credit risk.

It is equally important to consider corresponding changes at the insured depository institution (IDI) level, given the higher calibration of the IDI-level eSLR and its potential impact on bank lending. As banks are the primary deposit-taking entities within U.S. banking organizations, the expansion of the Federal Reserve's balance sheet has a significant impact on the balance sheets of bank subsidiaries. If IDI-level leverage ratios are not adjusted to account for the increase in reserve balances, BHCs may need to increase the Tier 1 capital of their bank subsidiaries, potentially leading to increased double leverage. Double leverage occurs when a BHC issues debt to fund investments in the equity of its subsidiaries, including its bank subsidiaries. During times of stress, when the bank subsidiary experiences losses, double leverage can make it more challenging for the BHC to service its debt or raise additional capital.

**Final Thoughts**

In conclusion, leverage ratios have become increasingly binding constraints for the largest U.S. banks, deviating from their intended role as backstops to risk-based capital requirements. This shift has been driven by the growth of safe assets, such as U.S. Treasury securities and reserves, outpacing the growth of banks' intermediation capacity. Using regulatory FR Y-9C data for the eight U.S. GSIBs over the last 10 years, Figure 3 shows that while U.S. Treasuries as a percentage of balance sheet assets have nearly quadrupled, their share of trading assets has decreased by half over the same period.

	Aggregate		
	1Q24	1Q14	Δ
<b>UST % of Assets</b>	11%	3%	7%
<b>Trading Assets % of Assets*</b>	6%	12%	-6%

\*Excluding Treasuries

The growth in U.S. Treasury securities has used balance sheet capacity and increased balance sheet costs attributable to the SLR and other post-crisis regulations. As a result, banks have significantly reduced their trading inventories, which serve as a proxy for market intermediation. The binding nature of these leverage ratios—among other regulatory distortions including punitive risk weightings in the

risk-based capital requirements for trading activities—can distort banks’ behavior and potentially impact market liquidity.

As the banking agencies continue to consider changes to the Basel III proposal, it is crucial for them to devote attention to the longstanding issues with leverage ratios and propose necessary adjustments, as previously promised. By doing so, they can restore the intended role of these ratios as backstops and maintain the overall effectiveness of the capital framework while mitigating potential negative impacts on Treasury market intermediation.

The bottom line is that the SLR is problematic for a financial system that features a bloated central bank balance sheet and substantial reliance on market intermediation.

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