# Holistic Capital Review

Remarks by

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at the

Bipartisan Policy Center

Washington DC

Thank you to the Bipartisan Policy Center for the opportunity to speak today. I'm here to report on my holistic review of capital for large banks and to outline steps that I believe are appropriate to update our capital standards so that banks can continue to serve our communities, households, and businesses.<sup>1</sup>

The review was a top priority because capital is fundamental to safety and soundness. I approached the task with humility. We need to be skeptical about the ability of bank managers or regulators to anticipate all emerging risks. Events over the past few months have only reinforced the need for humility and skepticism, and for an approach that makes banks resilient to both familiar and unanticipated risks.

Our dynamic financial system is complex and constantly evolving. Regulators and bank managers are limited in our ability to comprehensively identify risks and to measure them. We cannot fully appreciate how a specific vulnerability can interact with other vulnerabilities to amplify and propagate risk in the face of a shock, or multiple shocks. It is extremely difficult to identify shocks in advance. And we also cannot fully predict how firms and markets adapt to changes in the environment or to the behavior of regulators or other participants.

So, instead of trying to design rules to address every conceivable risk, regulators must focus broadly on resilience—ensuring that banks and the financial system can withstand challenges, wherever they emerge and however they are transmitted through the system. Fortunately, there is a component of bank funding—equity capital—that is

<sup>&</sup>lt;sup>1</sup> The views I express here are my own, and not those of the Board of Governors of the Federal Reserve System or the Federal Open Market Committee.

well suited to building resilience.<sup>2</sup> Banks rely on both debt and capital to fund loans and other assets, but capital is what allows the bank to take a loss and keep on operating. The beauty of capital is that it doesn't care about the source of the loss. Whatever the vulnerability or the shock, capital is able to help absorb the resulting loss and, if sufficient, allow the bank to keep serving its critical role in the economy. Higher levels of capital also provide incentives to a bank's managers and shareholders to prudently manage the bank's risk, since they bear more of the risk of the bank's activities.

### **Holistic Review of Capital Standards**

I initiated a review of capital standards as one of my first actions as Vice Chair for Supervision. This review was focused on capital requirements for large banks with more than \$100 billion in total assets. Capital requirements are multi-layered with different components. A holistic approach is important because the requirements function as a system—each component treats risks and associated capital needs differently, but all components together result in a certain amount of capital required. Banks manage their operations with an eye on the entire system, and as such, adjustments to one part of the regime may imply adjustments to another.

To that end, over the last nine months, I have engaged with a wide range of parties: policymakers and staff from the Federal Reserve and other agencies, banks and financial sector groups, public interest groups, members of Congress, and academics to get a broad perspective on how the Fed's capital standards interact with each other and the result they together achieve. In the midst of this review, we once again learned the

<sup>&</sup>lt;sup>2</sup> For a more in-depth discussion of why bank capital matters, see my speech in December 2022 on this topic: Michael S. Barr, "Why Bank Capital Matters," (speech at the American Enterprise Institute, Washington, DC, December 1, 2022), https://www.federalreserve.gov/newsevents/speech/barr20221201a.htm.

importance of resilience when a sudden bank run and contagion caused three large banks to fail and we experienced significant stress in the banking system, stemmed only by invocation of the systemic risk exception and creation of an emergency lending facility.

This should make us very humble indeed.

I reviewed whether changes would be appropriate to better align capital requirements with risk-taking, to help ensure that our banking system is sufficiently resilient to serve its vital role in our economy. Any proposed changes would go through the standard notice-and-comment rulemaking process, allowing all interested parties ample time to weigh in on the proposed changes. Any final changes to capital requirements would occur with appropriate transition times.

I will be pursuing further changes to regulation and supervision in response to the recent banking stress, including how we regulate and supervise liquidity, interest rate risk, and incentive compensation, as well as improving the speed, agility, and force of the Federal Reserve's supervision. I expect to have more to say on these topics in the coming months.

#### **Multiple Measures of Risk**

Our system of capital requirements uses multiple measures of risk, which work collectively to achieve an overall level of resilience. We have a set of risk-based requirements that are based on the risk of a bank's activities to its safety and soundness and to the financial system, and a set of non-risk-sensitive backstops, which are simple measures the market and regulators can use to understand and protect against the possibility that the risk-sensitive measures get the risk wrong and result in capital requirements that are too low. And we use stress testing as a complement to point-in-

time capital requirements. Stress tests measure bank resilience against a hypothetical shock. These equity capital requirements are complemented by long-term debt requirements, which help provide an additional cushion to restructure, sell, or wind down a bank that has entered resolution.

These multiple ways of measuring and mitigating risk are helpful for the resiliency of banks and the robustness of the system. Any single way of measuring bank risk would miss or underplay some aspect of risk, and each of the different approaches tends to measure risks not captured or measured as well by the others. Further, a capital framework with multiple ways of measuring risk is harder for banks to game.

Of course, there are also downsides to having multiple approaches to measuring risk in calculating capital requirements. The greater complexity itself introduces risk.

But on balance, I think multiple approaches are warranted.

#### **Conclusion of the Holistic Review**

Now let me turn to the conclusion of the holistic review. In sum, I believe that the existing approach to capital requirements is sound. As a result, my proposals build on that foundation. The existing approach includes the risk-based requirements, stress testing, the risk-based capital buffers, and the leverage requirements and buffers. Let me quickly summarize the proposal and then turn to each in more detail.

With respect to risk-based requirements, the standards should be updated to better reflect credit, trading, and operational risk. To help promote international comparability, the updates to the standards should be consistent with international standards adopted by the Basel Committee. The international standards were developed through a rigorous, lengthy process, have been under discussion for nearly a decade and will improve on the

extent to which capital requirements fully reflect the risks posed by different banks engaged in a variety of activities.

With respect to stress testing, I believe that the stress capital buffer framework is sound.<sup>3</sup> At the same time, I believe that the stress test should continue to evolve to better capture risk. The exploratory analysis conducted this year demonstrates the capacity of supervisory stress testing to test for a wider range of risks and the value of doing so. Any changes to the stress test should be complementary to the changes to the risk-based capital framework I mentioned above.

With respect to the other capital buffers—the global systemically important bank (G-SIB) surcharge<sup>4</sup> and the countercyclical capital buffer (CCyB)<sup>5</sup>—I am not recommending fundamental changes. For the G-SIB surcharge, I am recommending that we improve the measurement of systemic indicators under the G-SIB surcharge framework, reduce "cliff effects," and increase the sensitivity of the surcharge to changes in a bank's risk profile.

With respect to the enhanced supplementary leverage ratio (eSLR), I am not recommending changes to the calibration at this time. With the revisions in risk-based capital requirements I mentioned above, the eSLR generally would not act as the binding constraint at the holding company level, where Treasury market intermediation occurs.

<sup>&</sup>lt;sup>3</sup> The stress capital buffer framework uses the results of the supervisory stress test to calibrate a risk-sensitive buffer above a firm's minimum risk-based capital requirements. A firm whose capital ratios are at or below its minimum plus its stress capital buffer requirements and any applicable global systemically important bank (G-SIB) surcharge and countercyclical capital buffer (CCyB) is subject to automatic

restrictions on capital distributions.

<sup>4</sup> The G-SIB surcharge requires a firm that is identified as a global systemically important bank holding company to hold additional capital based on a measure of the firm's systemic risk.

<sup>&</sup>lt;sup>5</sup> The CCyB requires a firm to hold additional capital when systemic vulnerabilities are meaningfully above normal.

We will carefully monitor Treasury market intermediation, and if problems arise, will consider appropriate policy responses.

#### **Basel III Endgame**

An important aspect of my proposals will be to implement the changes to the risk-based capital requirements, referred to as the Basel III endgame, which are intended to ensure that our minimum capital requirements require banks to hold adequate capital against their risk-taking. There was a consensus among the Basel jurisdictions that current rules underestimate risks for the largest, most complex banks. The proposed reforms reflect our current understanding of risks and how to best measure those risks. The international agreement to implement these reforms was finalized more than five years ago, in 2017. Implementing these reforms in a timely way is important, and I am pleased we are beginning that process. And lastly, before I walk through the main areas of changes, I'd like to emphasize that any changes would not be fully effective for some years because of the notice and comment rulemaking process and any final rule would provide for an appropriate transition.

First, for a firm's lending activities, the proposed rules would end the practice of relying on banks' own individual estimates of their own risk and instead use a more transparent and consistent approach. Currently, large banks use their own internal models to estimate certain types of credit risk. These internal models for credit risk suffer from several deficiencies. Experience suggests that banks tend to underestimate their credit risk because they have a strong incentive to lower their capital requirements. In addition, the data doesn't lend itself to robust modeling and back testing in some cases because defaults are relatively infrequent. And estimates of credit risk for similar

exposures can vary substantially across firms. So, skepticism is in order. Standardized credit risk approaches—meaning we apply the same requirements to each bank and not let each bank develop their own requirements—appear to do a reasonably good job of approximating risks. And we have the additional rigor of a supervisory stress test to assess the credit risk of lending activities.

Second, for a firm's trading activities, the proposed rules would adjust the way that the firm measures market risk, which is the risk of loss from movements in market prices, such as interest rate, equity price, foreign exchange, and commodities risk. The proposed changes better align market risk capital requirements with market risk exposure and provide supervisors with improved tools. The proposal would continue to permit firms to use internal models to capture the complex dynamics of most market risks but would not rely on banks modeling certain market risks that are too hard to model.

Internal models of market risk can be more readily validated than internal models of credit risk because they are based on daily data and outcomes generally are known relatively quickly. The proposal would raise model quality standards. Firms would also be required to model risk at the level of individual trading desks for particular asset classes, instead of at the firm level. The proposal would also introduce a standardized approach that is well-aligned with the modeled approach, for use where the modeled approach is not feasible.

These changes would raise market risk capital requirements by correcting for gaps in the current rules. Requiring banks to model market risk at the level of individual trading desks better reflects the observation that correlations across risks can change dramatically in times of stress. Requiring banks to use a standardized approach for hard-

to-model risks is appropriate, in light of the weaknesses that were exposed in the 2008 financial crisis, when many firms did not have acceptable models for their risks. In addition, the proposal appropriately charges more capital for positions that are less liquid, in order to better capture the risks of illiquid trading positions.

Third, for operational losses—such as trading losses or litigation expenses—the proposed rules would replace an internal modeled operational risk requirement with a standardized measure. The proposal would approximate a firm's operational risk charge based on the firm's activities, and adjust the charge upward based on a firm's historical operational losses to add risk sensitivity and provide firms with an incentive to mitigate their operational risk.

One important question involves the size of institutions that the new risk-based capital rules should apply to, and I will recommend that the enhanced capital rules apply to banks and bank holding companies with \$100 billion or more in assets. A threshold of \$100 billion would subject more banks to our most risk-sensitive capital rules compared to the current framework, which applies to firms that are internationally active or have \$700 billion or more in assets. This expanded scope is appropriate for two reasons. First, the proposed rules are less burdensome for banks to implement than the current requirements, since they don't require a bank to develop a suite of internal credit risk and operational risk models to calculate regulatory capital. Second, our recent experience shows that even banks of this size can cause stress that spreads to other institutions and threatens financial stability. The risk of contagion implies that we need a greater degree of resilience for these firms than we previously thought, as the losses posed to society by the failure of a given firm are greater, and the probability that another firm may be a

victim to another firm's failure are higher. The enhancements to the capital rules should improve the resilience of these firms.

Importantly, the proposed adjustments would require banks with assets of \$100 billion or more to account for unrealized losses and gains in their available-for-sale (AFS) securities when calculating their regulatory capital. This change would improve the transparency of regulatory capital ratios, since it would better reflect banking organizations' actual loss-absorbing capacity. Realizing the losses from these securities, without adequate capital to protect from those losses, was an important part of the set of events that triggered the run on Silicon Valley Bank (SVB). If the bank had already been required to include those losses in its reported capital, it is less likely that the market and depositors would have reacted the same way. Furthermore, banks that were required to reflect unrealized losses on AFS securities in regulatory capital managed their interest rate risk more carefully, suggesting that the requirement to include gains and losses on AFS securities in regulatory capital leads to stronger risk management as well.

These changes would increase capital requirements overall, but I want to emphasize that they would principally raise capital requirements for the largest, most complex banks. We will have additional information when the proposal is published, but for now, let me put the proposed increases in context. Recall that banks are, by nature, very leveraged and fund only a small portion of their assets with capital. One can think of the proposal's more accurate risk measures as equivalent to requiring the largest banks hold an additional 2 percentage points of capital, or an additional \$2 of capital for every \$100 of risk-weighted assets. While this increase in requirements could lead to some

changes in bank activities, the benefits of making the financial system more resilient to stresses that could otherwise impair growth are greater.

That is not to ignore concerns that changes in capital requirements may cause firms to change their behavior and the way that financial services are provided to our economy. We intend to consider comments carefully and any changes would be implemented with an appropriate phase-in. This phase-in will allow ample time for banks to adjust their balance sheets and activities, and to build capital over time. In fact, most banks already have enough capital today to meet the new requirements. For the banks that would need to build capital to meet the requirements, assuming that they continue to earn money at the same rate as in recent years, we estimate that banks would be able to build the requisite capital through retained earnings in less than 2 years, even while maintaining their dividends.

## **Changes to the Stress Test to Improve Risk Capture**

As part of the holistic review, I have evaluated the Board's stress testing framework. In particular, I have considered whether the proposed changes to the risk-based capital framework should prompt adjustments to stress testing, and whether there are ways the stress test can be improved to make it a more effective test of banks' resilience. I have concluded that the framework for stress testing generally remains sound, but that we should review our global market shock and the stress test's approach to estimating operational risk so that they provide a complementary lens to our risk-based standards on market risk and operational risk, respectively.

Banks have raised concerns that the changes to the risk-based capital framework I described earlier, combined with the stress test, result in a "double counting" of risk that

is already captured in the minimum requirements. Conceptually, this shouldn't be the case, as the changes in the risk-based capital requirements affect the way that minimum capital requirements are calculated, and the stress test is used to calculate the buffer. But we will seek comments on all elements of the proposed risk-based capital adjustments, including whether interaction with the stress test results in an inappropriate treatment.

Fourteen years of stress testing, and the real-life surprises during that time, including the pandemic and the bank stresses this spring, have made it clear that stress tests need to be stressful to adequately prepare banks for unanticipated events. A key strength of stress testing is its ability to be responsive to the rapidly changing conditions by testing bank resilience to emerging or growing risks. In addition, stress testing can be used to assess banks' resilience to different kinds of stress in the financial system. For example, we have long known—and the recent experience with SVB reinforced—the importance of banks' resilience to funding stress.

The stress test should evolve to better capture the range of salient risks that banks face. In addition, the Board could use a range of exploratory scenarios to assess banks' resilience to an evolving set of risks and use the results to inform supervision.

### Minimal Adjustments to the G-SIB Surcharge to Improve Precision

As part of the holistic review, I have evaluated whether the proposed changes to the risk-based capital framework should prompt revisions to the G-SIB surcharge.

I am not recommending fundamental changes to the underlying framework at this time, but I will be recommending a series of adjustments of a more technical nature that would not reduce the resiliency of the largest banks or the strength of the surcharge.

Specifically, I will recommend that the Board propose to adjust the G-SIB surcharge

framework to better match a firm's systemic footprint. First, the proposal would measure on an average basis over the full year the indicators that are currently measured only as of year-end. This change would more accurately reflect the systemic risk profile of a firm and reduce incentives for a firm to reduce its G-SIB surcharge by temporarily altering its balance sheet at year end through so-called "window dressing." Second, the proposal would reduce "cliff effects" in the G-SIB surcharge by measuring G-SIB surcharges in 10-basis point increments instead of the current 50-basis point increments. Third, the proposal would make improvements to the measurement of some systemic indicators to better align them with risk. These changes would ensure that the G-SIB surcharge better reflects the systemic risk of each G-SIB.

Some have argued that certain fixed dollar elements of the G-SIB surcharge should be updated for changes in the economy since the surcharge was adopted. I am not recommending changes to the fixed elements of the calibration of the surcharge.

Maintaining the fixed elements of the G-SIB surcharge should help to provide a further incentive for G-SIBs to reduce their systemic footprint, and to promote competitive opportunities for large banks that are not-G-SIBs in order to maintain the diversity of our banking system, while providing further protections against systemically risky events.

### Continuous Assessment of Capital Needs and the CCyB

As part of the holistic review, I have evaluated whether to adjust the CCyB framework. I do not plan to recommend to the Board that we adjust the CCyB

<sup>&</sup>lt;sup>6</sup> Window dressing occurs when a firm takes action to reduce the values of its systemic indicators at yearend in a way that is not commensurate with the firm's actual systemic footprint.

<sup>&</sup>lt;sup>7</sup> Today, a bank's G-SIB surcharge increases in 0.5-percentage point increments (1.0%, 1.5%, 2.0%, etc.). Under the proposal, the G-SIB surcharge would increase in 0.1-percentage point increments (1.0%, 1.1%, 1.2%, etc.)

framework. The goal of the countercyclical capital buffer is to build buffers in good times to help prepare for bad times. As called for under our current CCyB framework, I would recommend that the Board activate a positive buffer if macroeconomic conditions suggested that it would be appropriate. Conversely, where times of stress would justify lowering capital buffers, we will consider taking accommodating actions as we did in the midst of the COVID-19 crisis.

### Calibration of the Enhanced Supplementary Leverage Ratio

As part of the holistic review, I have also evaluated whether to adjust the enhanced supplementary leverage ratio. While we should continuously improve our risk-based capital requirements to reflect our understanding of risks, experience has shown that there will be times when banks and regulators are unable to accurately measure all risks. That is why regulators have adopted a leverage ratio, which compares the amount of capital held by banks with their total assets. Leverage requirements do not vary based on risk-weighted assets. They provide a simple, transparent measure of solvency that is useful to banks, markets, and regulators, and a floor on the risk-based approaches. Yet problems can sometimes emerge if leverage ratios are the most binding of the capital requirements because then banks may have an incentive to do less low-risk, low-return activity, and to engage in higher-risk, higher-return activities.

Some have argued that when banks are close to the eSLR as a binding constraint that it has reduced Treasury market intermediation. The evidence on that is inconclusive. To the extent it matters, the revisions in risk-based capital requirements I discussed today would mean that the eSLR generally would not act as the binding constraint at the holding company level, where Treasury intermediation occurs. To 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.

### **Long-Term Debt**

A related proposal will be to introduce a long-term debt requirement for all large banks. Long-term debt improves the ability of a bank to be resolved upon failure because the long-term debt can be converted to equity and used to absorb losses. Such a measure would reduce losses borne by the Federal Deposit Insurance Corporation's (FDIC) Deposit Insurance Fund, and provide the FDIC with additional options for restructuring, selling, or winding down a failed bank. I support applying a long-term debt requirement to all institutions with \$100 billion or more in assets. This would add an important safeguard to a class of banks that came under pressure this spring after the failure of Silicon Valley Bank. If SVB had enough long-term debt outstanding, it might have reduced the risk of a run by uninsured depositors; and it might have given the FDIC more options to resolve the bank or merge it with a healthy institution. And importantly, more long-term debt at SVB would have reduced the cost to the FDIC of its resolution. All of these factors would have reduced the risk of contagion to other banks.

#### Conclusion

The comprehensive set of proposals that I have described here today would significantly strengthen our financial system and prepare it for emerging and unanticipated risks, such as those that manifested themselves in the banking system earlier this year. The holistic review began well before then, of course, and the steps proposed here address shortcomings in capital standards that did not begin in March of 2023. But in an obvious way, the failures of SVB and other banks this spring were a

warning that banks need to be more resilient, and need more of what is the foundation of that resilience, which is capital. Some industry representatives claim that inadequate capital had nothing to do with those bank failures. I disagree. It was an unsuccessful attempt by SVB to raise capital that caused uninsured depositors to look more closely at how the bank was capitalized.

Some industry representatives have claimed that SVB's problems were really related to poor management and shortcomings in the Federal Reserve's supervision. Indeed, those failings were thoroughly documented in a report I released in May, and steps by the Fed to address those issues will be announced in coming months. But it is not logical to argue that failings in supervision must mean that SVB was adequately capitalized—it wasn't—or that supervision by itself can somehow assure safety and soundness throughout the banking system. It is not a choice between supervision and capital regulation—capital is and has always been the foundation of a bank's safety and soundness.

Some industry representatives have claimed that raising capital requirements will push activity outside of the regulated financial sector. As I discussed in my speech on capital last December, we need to worry, a lot, about nonbank risks to financial stability. The answer, however, is not lower capital requirements for banks, but more attention to those nonbank risks. Further, as stress in nonbank financial markets is often transmitted to the banking system, both directly and indirectly, it is critical that banks have enough capital to remain resilient to those stresses.

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<sup>&</sup>lt;sup>8</sup> See Michael S. Barr, "Why Bank Capital Matters," (speech at the American Enterprise Institute, Washington, DC, December 1, 2022), https://www.federalreserve.gov/newsevents/speech/barr20221201a.htm.

For the reasons I have outlined today, we need to strengthen capital standards for large banks. That process will be deliberative and open to public participation and implementation of any changes agreed to will take a least several years, which is why it is so important to begin now. Everyone in America depends on a safe and stable financial system. By strengthening capital standards, we are ensuring that businesses have credit to grow and hire workers, and deal with the ups and downs in the economy. Stronger capital standards mean workers can depend on getting their paychecks and families can save and borrow to plan for the future. Our goal is a financial system that works for everyone, and having strong capital rules is essential for that.