

# Basel III Endgame

What you need to know

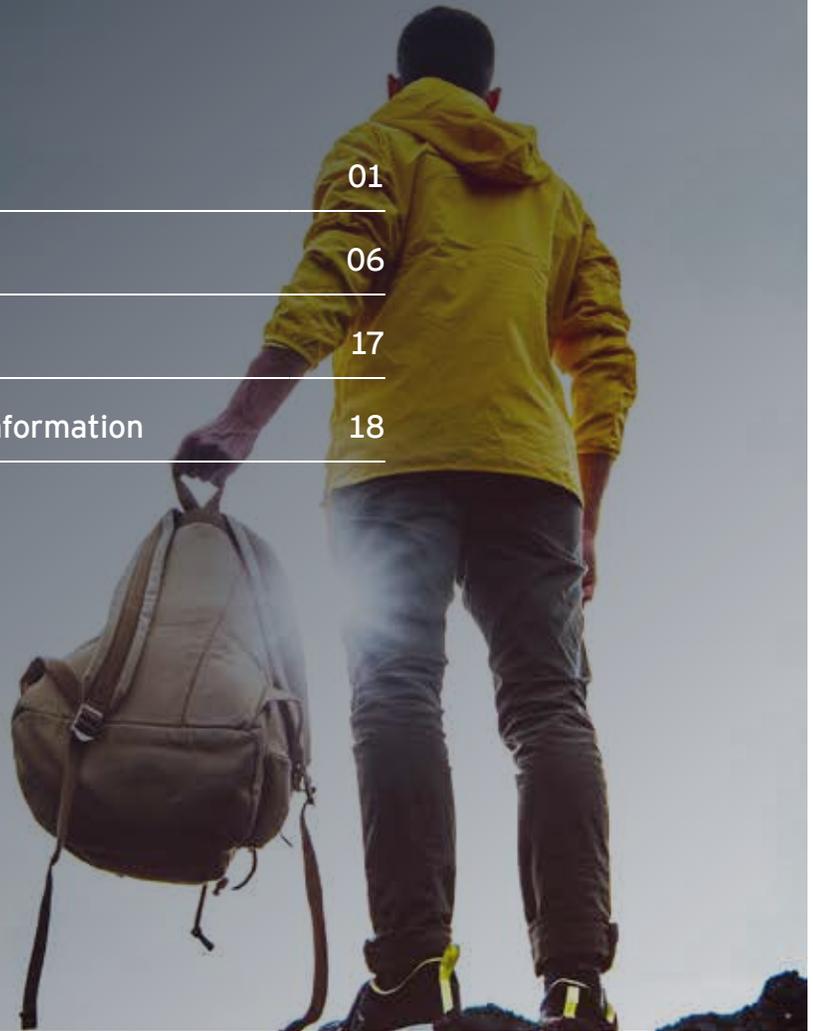
**September 2023**

The EY logo consists of the letters 'EY' in a bold, white, sans-serif font. A yellow diagonal bar is positioned above the 'Y', extending from the top right towards the center.

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## What you need know

- Basel III Endgame (B3E) will fundamentally alter how banks with \$100b or more of assets approach risk-based regulatory capital and capital management
- The introduction of the expanded risk-based approach (ERBA) will likely increase risk-weighted assets (RWA) for banks in this group, particularly when coupled with the impacts to the stress capital buffer (SCB), and encourage banks to focus on capital allocation and efficiency
- Greater risk sensitivity and granularity will require banks, particularly Category III and Category IV, to enhance their risk data and technology capabilities and controls to the levels they apply to their reported financial data
- Timelines for B3E are tight and applying proper governance and project management will be key to efficient implementation and a strong BAU capital production process at go-live

# The big picture

The Notice for Proposed Rulemaking (the NPR or the proposal), issued jointly by the Federal Reserve, the Office of the Comptroller of the Currency (OCC) and the Federal Deposit Insurance Corporation (FDIC) (collectively the Regulators or the Agencies) for the Fundamental Review of the Trading Book (FRTB) and Basel III Finalization, collectively Basel III Endgame (B3E), was published July 27, 2023. The proposed adoption of the Basel Committee on Banking Supervision (BCBS) standards is largely aligned with international specifications and foreign peers, but there were some unexpected amendments for the US, and banks will need to adapt quickly to meet these requirements. This briefing first summarizes the major components and the implications for impacted firms, followed by a deeper discussion by risk component.

Figure 1: Compliance and transition timeline



## Timing and scope

The US NPR for B3E will significantly alter the regulatory capital regime for US banks. The NPR proposes a July 1, 2025, compliance date for banking organizations in Categories I-IV, including US intermediate holding companies (IHCs) of foreign banking organizations (FBOs), to develop the capabilities to produce the new expanded risk-based approach (ERBA) ratio. This leaves banks approximately two years to interpret and translate the new rule, assess its impact, identify and address data and technology needs, test the results prior to go-live, and adjust their business profiles and strategies. Data governance will be critical in meeting these timelines and ensuring reporting accuracy. Banks will need to consider the completeness, timeliness, adaptability, clarity and usefulness of the data as they develop their new calculation and reporting capabilities.

The proposal also includes a three-year transition period for ERBA risk-weighted assets (RWA) and for Category III and Category IV banks to comply with the elimination of the accumulated other comprehensive income (AOCI) opt-out election.

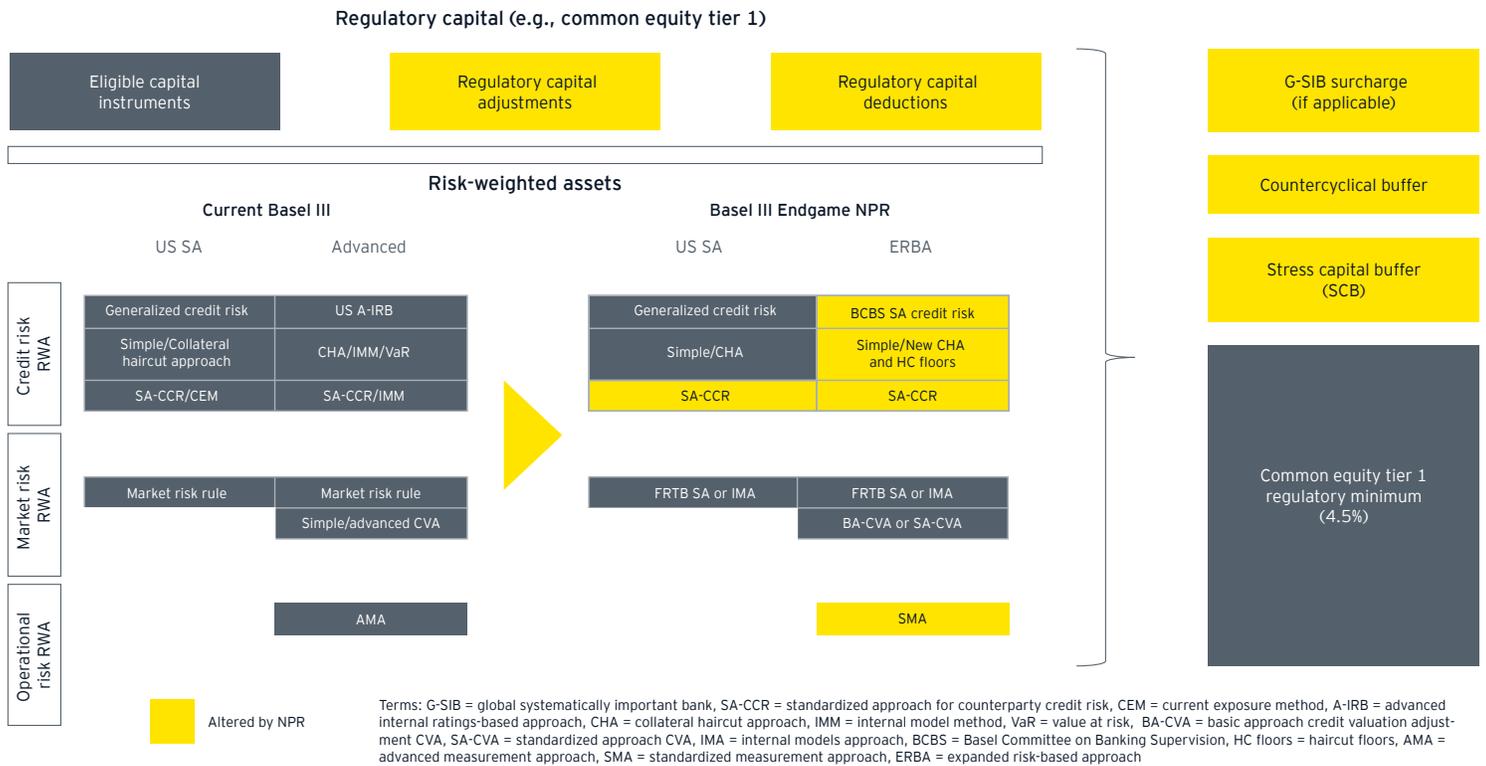
Category	Category I	Category II	Category III	Category IV
Banking organization criteria	U.S. global systematically important banks (G-SIBs)	\$700b or more of total assets or \$75b or more in cross-jurisdictional activity	\$250b or more in total assets or \$75b or more in non-bank assets, weighted short-term wholesale funding or off-balance sheet exposure	\$100b or more in total assets

Source: "Part 252—Enhanced Prudential Standards (Regulation YY)," Code of Federal Regulations, [www.ecfr.gov/current/title-12/chapter-II/subchapter-A/part-252](http://www.ecfr.gov/current/title-12/chapter-II/subchapter-A/part-252), September 8, 2023.

## Revised capital ratios and potential capital impacts

In a departure from the existing US regulatory capital regime, the Agencies have extended the application of two risk-based capital ratio approaches for assessing capital adequacy to banks with \$100b or more in assets. Previously this only applied to Category I and Category II banking organizations. Consistent with the Collins Amendment, banks will be subject to the more punitive of these two ratios. Stress testing and buffer requirements, including the stress capital buffer (SCB), will also consider ratios calculated under ERBA. The proposal retains the current US standardized approach ratio (US SA), with some modifications, while the ERBA RWA calculations are largely aligned to the BCBS standardized capital ratio. Additionally, the AOCI filter was removed for all Category III and Category IV banks, requiring them to capture the mark-to-market (MTM) impacts of their available-for-sale (AFS) securities in their capital ratios. The regulators also made technical adjustments to the G-SIB surcharge that could result in an *approximate 13 basis point increase* in the average method two surcharge.

Figure 2: Capital ratios



### Credit, securitization and counterparty

The proposal prohibits the use of internal models for computing credit RWA, eliminating the advanced approach ratio in favor of the ERBA. The ERBA adopts much of the categorization and granularity for risk weighting specified by the BCBS but also increases the risk weights relative to those prescribed by the BCBS in certain categories, including exposures to banks, residential real estate and retail exposures. The NPR would modify the treatments for off-balance sheet exposures, in line with the BCBS, with the impact relative to US SA depending on each bank's individual exposures. The Agencies also removed a 100% risk weight bucket for equities, potentially increasing RWA.

The proposed ERBA treatment for corporates could benefit banks with high-credit-quality counterparties that have publicly listed securities, relative to the US SA. No changes are proposed to risk-weight treatment for exposures to sovereign, supranational multilateral development banks (MDBs) and public sector entities (PSEs). Similarly, no revisions are proposed for other assets, pre-sold construction, statutory multifamily and high-volatility commercial real estate (HVCRE) exposures.

The standardized approach for counterparty credit risk (SA-CCR) calculation was updated with technical amendments and is proposed to apply to Category III and Category IV banks as well. The NPR also updated the securitization framework based on the securitization standardized approach (SEC-SA) from the BCBS framework, adopting the higher supervisory calibration parameter and the lower risk-weight floors but not adopting the potential benefits from the simple, transparent and comparable (STC) framework.

Finally, the proposal adopted the minimum haircut floors for repo-style transactions in addition to modifying the collateral haircut approach (CHA), in line with the BCBS. The new CHA formula rewards well-diversified netting sets and could reduce overall RWA for securities financing transactions. Overall, the haircut floors will increase RWA for transactions in which they are applied if banks do not use haircuts that exceed the minimums, though the US Agencies included an additional exemption for the haircut floors not contemplated by BCBS that will likely reduce the scope of transactions for the floors.

## Market risk and CVA RWA

As expected, the Agencies proposed adopting both the standardized and modeled approaches for FRTB. The NPR largely follows the BCBS framework for the modeled approach, retaining the profit and loss (P&L) attribution test (PLAT), backtesting requirements, and stoplight thresholds to limit cliff effects. Consistent with the BCBS framework, the NPR also introduces a standardized approach for market risk, which is intended to be a risk-sensitive and credible fallback to the modelled approach for market risk RWA. RWA is expected to rise overall, particularly for firms that migrate from the current market risk rule framework to the FRTB standardized approach; however, the modeled approach will likely also yield higher RWA due to components such as non-modelable risk factors. Desk organization and structure will also be important and require a balance between efficient RWA results and the model's ability to satisfy the PLAT and backtesting requirements.

The Agencies also adopted the BCBS credit valuation approach (CVA) framework, proposing the basic approach (BA-CVA) and standardized approach (SA-CVA) calculations. Unlike the EU requirements, the US NPR confirms that CVA capital must be calculated for all counterparties with CVA-covered positions (all derivatives except cleared transactions) with no exemptions, resulting in the inclusion of corporates, pension funds and certain other counterparties.

## Operational risk RWA

The US Agencies have proposed implementing the standardized measurement approach (SMA) as part of the new capital ratio. The US SMA will largely follow the BCBS framework with some exceptions. Most banks currently calculating operational risk RWA under the advanced measurement approach (AMA) will likely see reduced RWA from the SMA. However, its inclusion in ERBA alongside a non-modeled credit risk RWA will likely result in an overall increase in RWA and capital relative to US SA.

## Regulatory reporting and Pillar 3 disclosures

The NPR retains the qualitative aspects of the Pillar 3 disclosure framework with modifications to account for the changes in the risk-weighting approach. Most quantitative disclosures are proposed to be removed from Pillar 3 and instead added to regulatory reporting forms. Impacts on the regulatory reporting forms for regulatory capital will be clarified in the future when the revised forms are proposed.

## G-SIB surcharge

Updates have also been proposed to the G-SIB score methodology, including the use of averages instead of point-in-time measurements for systemic indicators; 10 basis-point increments for a surcharge amount instead of the current 50 basis points; and changes, additions and clarifications to the existing systemic indicators.



## Potential impacts to other requirements

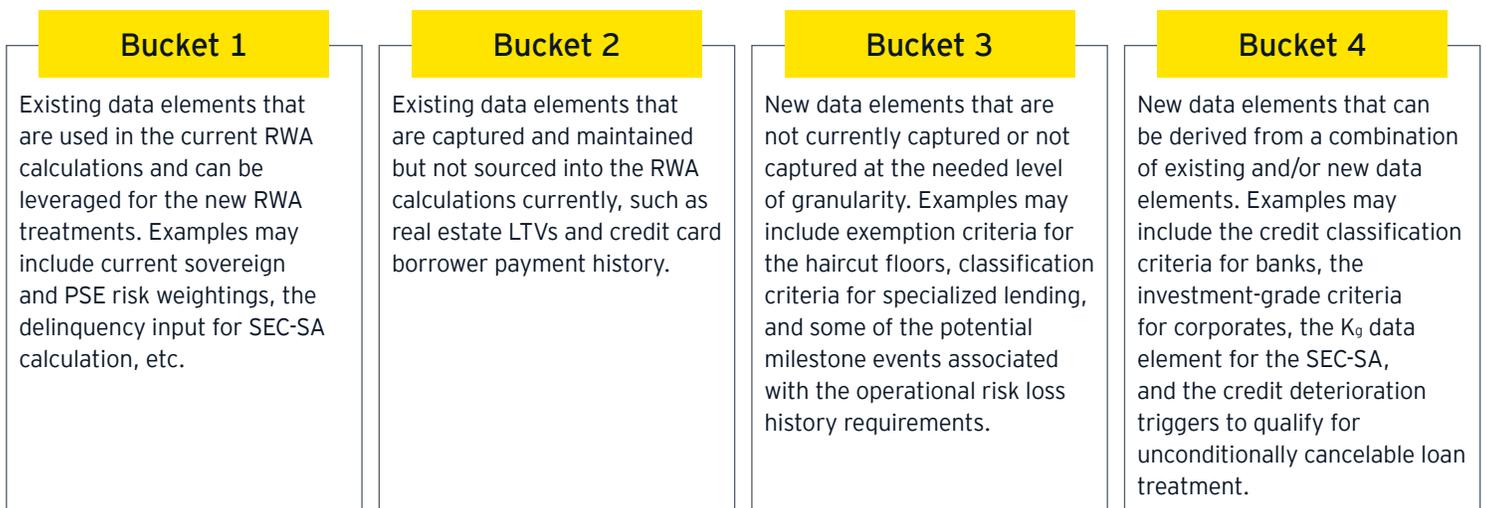
While primarily focused on the risk-based capital rules, the NPR will also impact other US prudential requirements. For example, the NPR removed the use of modeled approaches for calculating exposure under the single counterparty credit limits (SCCL), requiring the use of standardized exposure measures only. Moreover, higher RWA under the ERBA would result in new or higher total loss-absorbing capacity (TLAC) and long-term debt (LTD) requirements.

## What does this mean for banks?

B3E implementation activities will need to be performed against a backdrop of heightened regulatory scrutiny, increasing the pressure on banks to establish strong program management to meet tight deadlines. Banks will want to quickly understand the impacts of the provisions in the proposal on their businesses and exposures, and leverage this information as they respond, both individually and through industry groups, to questions in the proposal during the comment period that runs through November 30, 2023. Firms that better understand their gaps relative to the new requirements will also be able to more quickly mobilize resources to address those needs, including through their planning and budget cycles for 2024 and 2025.

- ▶ **Capital management and business strategy will need to adjust:** ERBA could represent the binding constraint for many banks and introduces a new set of capital considerations that banks need to manage. This has implications in capital strategy, capital allocation and risk-return evaluation. The increase in binding levels of RWA will require banks to recalibrate their existing return on capital hurdles. Metrics that are calibrated to the current standardized and or advanced approaches for both the enterprise and individual businesses will yield different results for return on risk-based regulatory capital for ERBA. Management needs to assess the impact of changes to allocated capital, measure and monitor more granular portfolio characteristics based on the underlying business and risk drivers of ERBA, and adjust business mix and portfolio strategy based on refreshed views of risk-adjusted return on regulatory capital. For example, the introduction of a separate operational risk RWA component under ERBA may lead to a different allocation of capital and return on capital expectations. A high-volume business that has experienced higher historical operational risk losses would be more negatively impacted than a similar high-volume business that had lower historical operational risk losses. This also extends to evaluations of marginal cost of capital when assessing new business volumes and transactions. For example, banks may need to further fine-tune their risk-based pricing for residential mortgages based on more granular loan-to-value (LTV) information. These impacts may lead banks to revisit how they structure their businesses and emphasize certain aspects of their business models over others going forward.

- ▶ **Clear governance and planning will improve efficiency and reduce the potential for issues:** Banks should leverage their existing regulatory capital governance in structuring the approach to implement B3E. Banks should take the opportunity to strengthen governance to oversee a significant level of change and new BAU processes. This includes identifying the committee responsible for approving key decisions, reviewing progress, understanding the RWA impacts and signing off for go-live. The program will require inputs from stakeholders across the bank, including finance, risk, legal, lines of business, treasury and regulatory reporting; it is important to establish accountability at the onset. Determining ownership early will also allow the bank to respond nimbly to the new requirements, particularly with respect to resourcing, 2024 and 2025 budgeting, and planning the future IT book of work. Developing guidelines for identifying what constitutes an interpretation, assumption, implementation choice or other program decision, with accompanying escalation criteria, will remove confusion and reduce the potential for rework. The regulatory expectations for review and challenge, particularly by senior managers and committees, will increase the time needed to implement. Banks should take a holistic approach to planning their control structure, identifying key points in their processes and establishing strong controls that are designed to address their inherent risks. Incorporating time to develop documentation will help to facilitate the robustness of the process and controls while also reducing the potential impact from key-person risk. Documentation that describes the rule, the bank's interpretation of the rule, and the approach to implementing it with the accompanying data, technology, process and control roadmaps, will facilitate better capital production execution and reduce the potential for lost institutional knowledge.
- ▶ **Data and definitions are the focus:** Banks will benefit from analyzing the rules up front to define the target state process and related data requirements to allow sufficient time for implementation. Data requirements will likely include existing data elements that are currently captured and maintained, as well as new data elements that need to be captured. Banks with strong data management practices will be better positioned to identify, source and control the required data elements to support implementation. Incremental data attributes will need identification and sourcing from golden sources and to be managed through the data supply chain in a controlled manner. Data elements for the rule will likely take one of four forms:



- ▶ Proper governance both for implementation and ongoing maintenance in BAU will require the data to be in an accessible, transparent and auditable form. Reviews of the calculations, both internal and by the Regulators, will require bank respondents to extract data at various points in the calculation lifecycle.
- ▶ **Technology investments will be necessary given the significant changes:** The effort to implement the new Basel framework will vary by the size and complexity of each institution. Category III and IV banks will require front-to-back investments in their technology infrastructure to support upstream exposure classification and downstream regulatory reporting and attestations. For these banks, the control environment will need to be significantly strengthened to demonstrate auditability and transparency in line with regulatory expectations. Larger banks will benefit from leveraging these requirements to serve as a catalyst for modernizing their capital infrastructure and integrating more seamlessly with related stress testing and other finance capabilities.

### Regulatory capital transformation: B3E as a catalyst for change

While banks are preparing their effort models, budgets and business cases for implementing the B3E requirements, banks should recognize B3E as a significant opportunity to further modernize capital infrastructure. Banks may look to modernize their capital infrastructure for the following reasons:

- ▶ **Prior generation technology:** Most banks are still relying on legacy infrastructure put in place over eight years ago. Banks may find it increasingly difficult to develop incremental capabilities on top of outdated infrastructure and accumulated technical debt to support increasing regulatory and business demands.
- ▶ **Increased regulatory scrutiny:** Regulatory reviews since 2020 have focused on governance, oversight, production and controls concerning the accuracy of regulatory capital calculations. Time and resource demands to support enhanced governance will further exacerbate resource and technology needs.
- ▶ **Lack of agility to respond to ad hoc requests:** Fragmented infrastructure may allow for greater customization for individual businesses, but it may also hamper the ability to quickly and accurately aggregate data.
- ▶ **Inefficiency and high operational costs:** Firms that have a high reliance on end-user computing tools and other manual processes across the capital management lifecycle, which increases cycle times and increases operational costs. A robust technology solution with a high level of automation and straight-through processing can help banks better streamline the process and achieve significant cost reduction in the long run.

Banks newly scoped into these rules (i.e., > \$100b in assets) will have the benefit of leveraging prior lessons learned from other institutions into their technology roadmap.



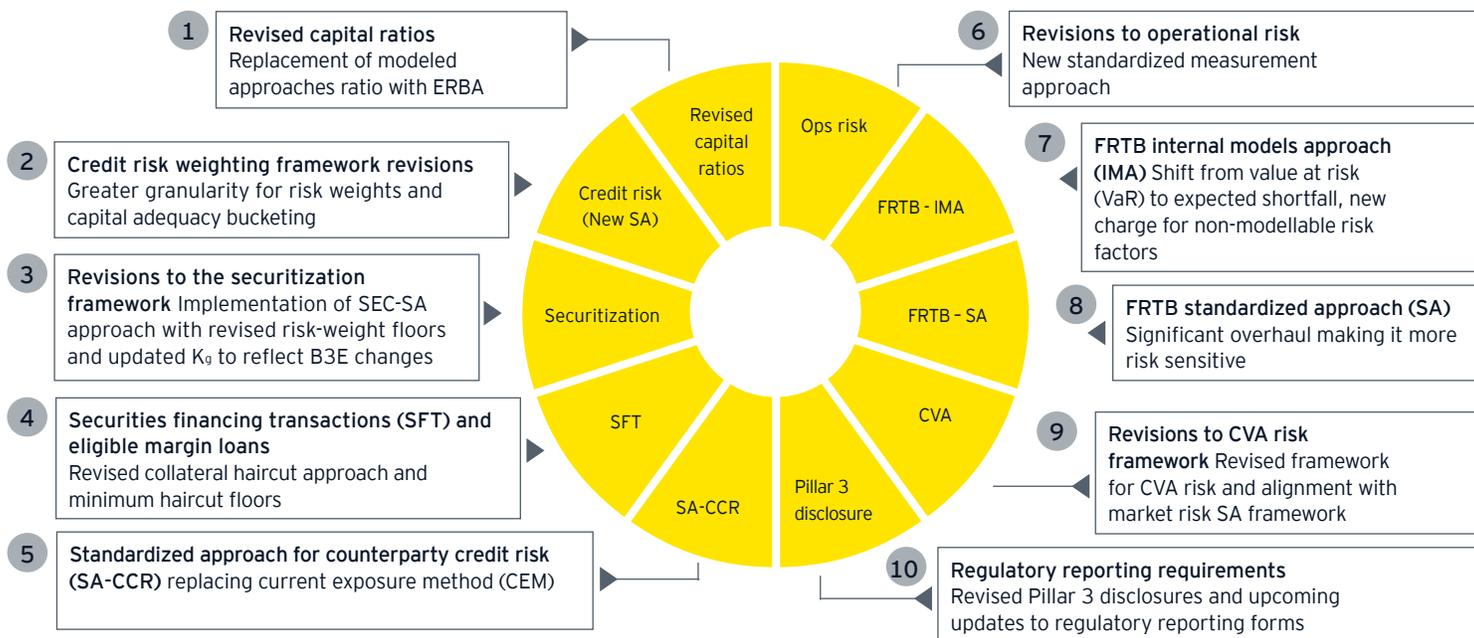
# What is in the proposal?

## Further discussion of the proposal by risk components

The changes for both RWAs and the broader capital adequacy framework represent a significant adjustment to the US regulatory capital regime. Banks with total assets of \$100b or more will need to produce their regulatory capital ratios based on the B3E RWA calculations under ERBA, in addition to their US SA (standardized approach) RWA. While the primary focus of the proposal is the ERBA RWA calculation and associated regulatory capital ratios, other components of the US capital adequacy framework will be impacted, including the supplementary leverage ratio, stress capital buffer and G-SIB surcharge.

The Agencies provided a three-year transition period from the July 1, 2025 compliance date to allow banks time to adjust for the impacts stemming from the anticipated final rule. In-scope banks will multiply their ERBA RWA by 80% from July 1, 2025, through June 30, 2026. The transition will rise in increments of 5% each year until full implementation on July 1, 2028. The transition for RWA was specific to ERBA, implying that the impact of FRTB on the US SA ratio will be in effect from July 1, 2025, onward. Additionally, Category III and Category IV banks will multiply their AOCI adjustment amount by the appropriate transition percentage over the three-year period. The transition percentage of 25% on July 1, 2025 and increase by 25% increments each year until the phase-in ends on July 1, 2028.

Figure 3: Proposal components



### 1. Revised capital ratios

The Regulators have maintained the common equity tier 1 (CET1) capital, tier 1 capital and total capital ratios framework and have not altered the minimum capital levels associated with each of these ratios. The current advanced approach for RWA that applies to Category I and Category II firms is being removed in favor of ERBA, a new RWA methodology based on the BCBS's Basel III standardized approach. This RWA stack will include credit RWA, equity RWA (historically included in credit), market RWA (SA or internal models approach (IMA)), operational RWA and CVA RWA, less adjusted allowance for credit losses not included in tier 2 capital and allocated transfer risk reserves. The proposal instituted the capital output floors as part of ERBA to cap the benefit from use of internal models for market risk. Banks will calculate the ERBA floor by multiplying 72.5% against their aggregate credit, equity, operational, CVA and

SA market risk RWA, and then subtracting their adjusted allowance for credit losses not included in tier 2 capital and allocated transfer risk reserves. They will compare ERBA against the ERBA floor and take the more punitive of the two. The bank's minimum required capital will then be determined by the higher of the existing US SA RWA calculation and the ERBA calculation, in compliance with the Collins Amendment.

The NPR would also revise the SCB calculation based on the higher of SA or ERBA RWAs as of the final quarter of the previous capital plan cycle. Categories I-III banks would also project the binding ratios as part of their company-run stress tests and capital planning activities. Category IV firms would project the ratios under the baseline conditions.

The proposal standardizes the definition of capital across Categories

I-IV, replacing some of the simplifications permitted for Categories III and IV banks. Categories III and IV banks will now be required to reflect all AOCI components in CET1, except gains and losses on cash-flow hedges where the hedged item is not recognized at fair value on the bank's balance sheet. Categories III and IV banks will need to adopt investment portfolio strategies more in line with larger peers as they manage AFS and held-to-maturity (HTM) allocations, identifying and managing complementing and overlapping factors between capital, liquidity and accounting management, particularly where there are conflicts. The Agencies noted an observed shift from AFS to HTM for banks that could not elect the AOCI opt-out. Categories III and IV banks will also be required to comply with the individual 10% thresholds and 15% aggregate threshold for mortgage servicing assets (MSAs), temporary deferred tax assets (DTAs) that cannot be realized through net operating loss carrybacks, and significant investments in the capital of unconsolidated financial institutions. The Agencies estimated that these two changes would equate to a 4.6% increase in CET1 requirements and a 3.8% increase in leverage requirements for Category III banks and 2.6% and 2.5% for Category IV banks. Category III US intermediate holding companies (IHCs) of foreign banking organizations (FBOs) would see increases of 13.2% and 9.7%.

Categories III and IV banks would also be required to make deductions for nonsignificant investments in the capital of unconsolidated financial institutions exceeding 10% of CET1 (less deductions and adjustments) and significant investments in the capital unconsolidated financial institutions not in the form of common stock. The deduction for covered debt instruments and minority interest limitation would also be extended to Categories III and IV banks. The impact of these changes will vary by bank and will likely only impact those with more complicated balance sheets.

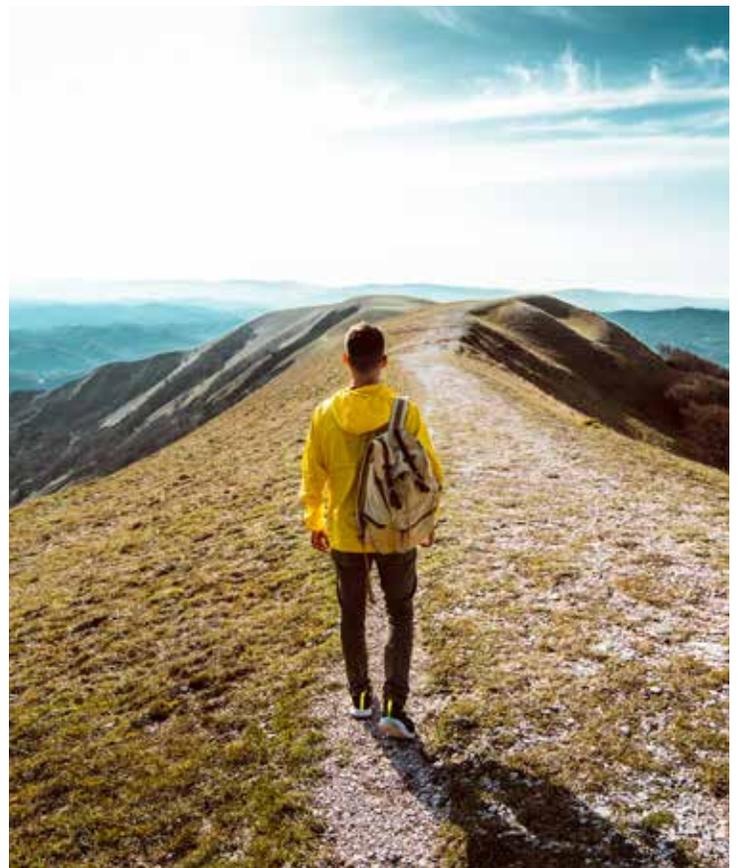
The Agencies also took steps to harmonize tier 2 capital allowance inclusions with the elimination of the advanced approach. Banks will deduct the adjusted allowance for credit losses (AACL) included in tier 2 capital from total capital and add AACL up to 1.25% of total credit RWA to total capital under ERBA.

## 2. Credit risk weighting framework revisions

As widely anticipated, the modeled components of advanced approaches credit RWA have been eliminated from the US risk-based capital framework. In adopting ERBA, the Regulators are proposing a version of the BCBS standardized approach credit RWA regime to replace the current US advanced approaches while retaining the US SA. Their stated objective in introducing the ERBA is to improve risk sensitivity by applying a more granular framework to determine risk weights.

### Summary of key revisions to credit risk RWA

- ▶ **Real estate exposures:** more granular methodology based on LTV and dependency on cash flows (CFs) generated from property
- ▶ **Corporates:** introduction of new classification categories for project finance and risk weight of 65% for investment-grade corporates; for investment-grade corporates with publicly traded securities outstanding, necessitating additional data and creating a dichotomy in treatment between public and private companies
- ▶ **Banks:** new subcategories for risk-weighting bank counterparties based on their assessment as investment grade and whether they meet or exceed published minimum capital requirements and buffers
- ▶ **Equities:** removes 100% risk weight treatment applicable to nonsignificant equity exposures
- ▶ **Off-balance sheet exposures:** unconditionally cancellable commitments (e.g., credit cards) receive 10% credit conversion factor (CCF) instead of the current 0%
- ▶ **Other changes:** new requirements for regulatory retail, transactors, defaulted borrowers and minor revisions to credit conversion factors (CCF) for off-balance sheet exposures



New categorization and treatment will require firms to build on current state data and systems to adapt to the changes; source new data elements from internal or vendor systems (e.g., LTV ratios), and update data quality control, BAU processes, reporting procedures, etc., for changed data elements and to meet B3E requirements.

## Real estate

Calculating RWA for real estate exposures under ERBA follows the BCBS framework, with some modifications. Overall, low LTV loans could receive lower risk weights relative to the US SA, but it will depend on the source of repayment, as described below:

- ▶ Adopted the LTV approach for both residential and commercial real estate; however, increased residential real estate risk-weight calibrations by 20% at each level
  - ▶ Prohibited the inclusion of private mortgage insurance (PMI) when calculating LTV, requiring banks to source LTVs that exclude its impact
  - ▶ Assigned risk weights in ERBA of 40% to 90% for residential real estate exposures that do not depend on the cash flows of the property, and 50% to 125% for those that depend on the cash flows of the property vs. a 50% risk weight under US SA for residential mortgages
- ▶ Requires banks to source flags that identify the factors considered during underwriting.
  - ▶ Retained the high volatility commercial real estate (HVCRE) category and associated 150% risk weight from the US SA
  - ▶ Introduced the acquisition, development and construction (ADC) category with a 100% risk weight
  - ▶ Adopted lower risk weights relative to US SA for regulatory CRE with an LTV of 80% or less
    - ▶ Requires loans to meet certain criteria concerning the status of the property, lien priority, and underwriting and valuation standards to qualify as regulatory real estate or they will fall into one of the higher risk weight categories.

### Residential real estate risk weights (RW)

	LTC ≤ 50%	50% < LTV ≤ 60%	60% < LTV ≤ 80%	80% < LTV ≤ 90%	90% < LTV ≤ 100%	LTV > 100%
Residential, not materially dependent on CFs	20%	25%	30%	40%	50%	70%
Residential, materially dependent on CFs	30%	35%	45%	60%	75%	105%

### Commercial real estate risk weights

	LTC ≤ 60%	50% ≤ LTV < 80%	LTV > 80%
CRE, not materially dependent on CFs	MIN (60%, RW of counterparty)	RW of counterparty	
CRE, materially dependent on CFs	70%	90%	110%

## Corporates

General corporate exposures will be assigned a 100% risk weight in ERBA, equivalent to the risk weight under the US SA. The NPR also proposed adopting the investment-grade corporate designation, assigning a 65% risk weight to corporate entities of higher credit quality and with publicly traded securities or parents with publicly traded securities. The new investment grade category could result in lower risk weights for creditworthy public firms relative to their privately held peers.

A risk weight of 100% was also proposed for exposures for the acquisition or financing of physical commodities or equipment and project finance in the operational phase. Project finance exposures that have not reached the operational phase would receive a 130% risk weight.

## Banks

The NPR adopts the BCBS approach for banks, likely increasing RWA for bank exposures relative to the US SA.

- ▶ Banks would be assigned to one of three buckets, based on their current capital levels and risk weighted between 40% and 150%.
- ▶ Assigning bank exposures to the buckets will require current capital requirements relative to minimums and buffers by jurisdiction.
- ▶ Reduced risk-weight treatment for exposures with original maturities of three months or less was excluded from the NPR.

## Equities

Adopting the BCBS approach for equities will likely increase RWA relative to US SA. The current approach for US SA was not adjusted.

- ▶ The proposal eliminates the 100% risk assignment for non-significant equity exposures (NSEE) below the 10% total capital threshold and the effective portion of hedge pairs; many of these exposures will likely be assigned to higher-risk-weight buckets.
- ▶ Risk weight for publicly traded equity is 250% in ERBA and 300% in US SA, consistent with the BCBS.

## Regulatory retail and off-balance sheet exposures

The proposal introduces the regulatory retail category for exposures such as student loans, auto loans and credit cards to individuals or small businesses, consistent with the BCBS, though the risk weights were increased by 10%.

- ▶ Exposures that qualify would receive an 85% risk weight under ERBA, in contrast to a 100% risk weight in US SA, while failing to meet the necessary criteria results in an ERBA risk weight of 110%.
- ▶ Customers that fully pay their credit card each month for the past 12 months would receive a 55% risk weight.
- ▶ Commitments that receive a 20% or 50% credit CCF, based on their maturities under US SA, will likely receive a 40% CCF in ERBA.
- ▶ Unconditionally cancelable revolving exposures receive a 10% CCF under ERBA vs. a 0% CCF under US SA.

RWAs for credit cards could be higher in ERBA than that of US SA despite the lower risk weights because banks will be required to capture 10% of the undrawn amount. They will want to carefully manage the size of the credit limits they extend, even to more creditworthy customers, as they try to balance the more punitive treatment to the ERBA treatment for undrawn amounts with attracting creditworthy customers profitably.

## 3. Revisions to the securitization framework

The proposal would also adopt the BCBS' SEC-SA for calculating ERBA RWA, which is substantively similar to the current simplified supervisory formula approach (SSFA). SEC-SA includes adjusted input parameters and risk-weight floors that may increase or decrease RWA, depending on the risk profile and nature of the position. The NPR would also remove certain products from the securitization framework, such as nth-to-default credit derivatives. Certain types of securitization exposures also have specialized treatment, such as securitizations backed by non-performing loans (NPLs) or credit-enhancing interest-only strips (CEIOs). Additionally, the input for the capital charge of the underlying exposures ( $K_G$ ) will be set using ERBA, which may pose a potential challenge to sourcing the granular data required (e.g., underlying residential mortgage exposures by LTV) to apply ERBA risk-weighting methodologies.



## 4. Securities financing transactions (SFTs) and eligible margin loans

The Agencies proposed revising the existing CHA, consistent with the comprehensive approach, and implementing the minimum haircut floors in line with the BCBS standards.

- ▶ The new CHA includes a diversification parameter that benefits netting sets containing many securities each with a market value of 10% or more of the highest market value security in the netting set.
- ▶ Haircuts for the new CHA were also modified to align with BCBS haircuts, rising overall and requiring an issuer to have publicly traded securities to qualify as financial collateral
- ▶ A diversification benefit from the CHA could reduce the exposure amount and RWA for securities financing businesses, improving their return on capital performance and increasing the capacity to do business.

The minimum haircut floors will apply to certain uncleared transactions with unregulated financial institutions:

- ▶ Collateral upgrade trades, determined by the prescribed regulatory haircuts
- ▶ Trades in which the bank lends cash and receives collateral that is not securities other than non-defaulted sovereigns

The proposal also expanded on the exemptions from the haircut floors beyond what the BCBS specified to include trades that the bank needs to meet current or anticipated demands and not to provide financing to an unregulated financial institution.

Overall, the haircut floors could potentially increase RWA for transactions in which they are applied if banks do not assign haircuts that exceed the minimums. Banks that apply the new exemption to their trades to dampen this impact should be diligent in developing and documenting the framework that they use to identify trades needed to meet their own demands. They may consider raising their haircuts rather than incurring the punitive RWA treatment for falling below the floors, potentially reducing revenue and market liquidity for certain types of trades and market participants.

The haircut floors will require additional data flagging additionally, exempted transactions contained in a netting set with in-scope transactions can be considered uncollateralized if the netting set value falls below the floor and indicators to identify core market participants or agreements with certain reinvestment provisions, such as upgrade trades or cash reinvestment, which may impact existing tech build and sourcing. The inclusion of the haircut floors is consistent with BCBS rules, though regulators in other jurisdictions have not instituted them.

#### **5. Standardized approach for counterparty credit risk (SA-CCR)**

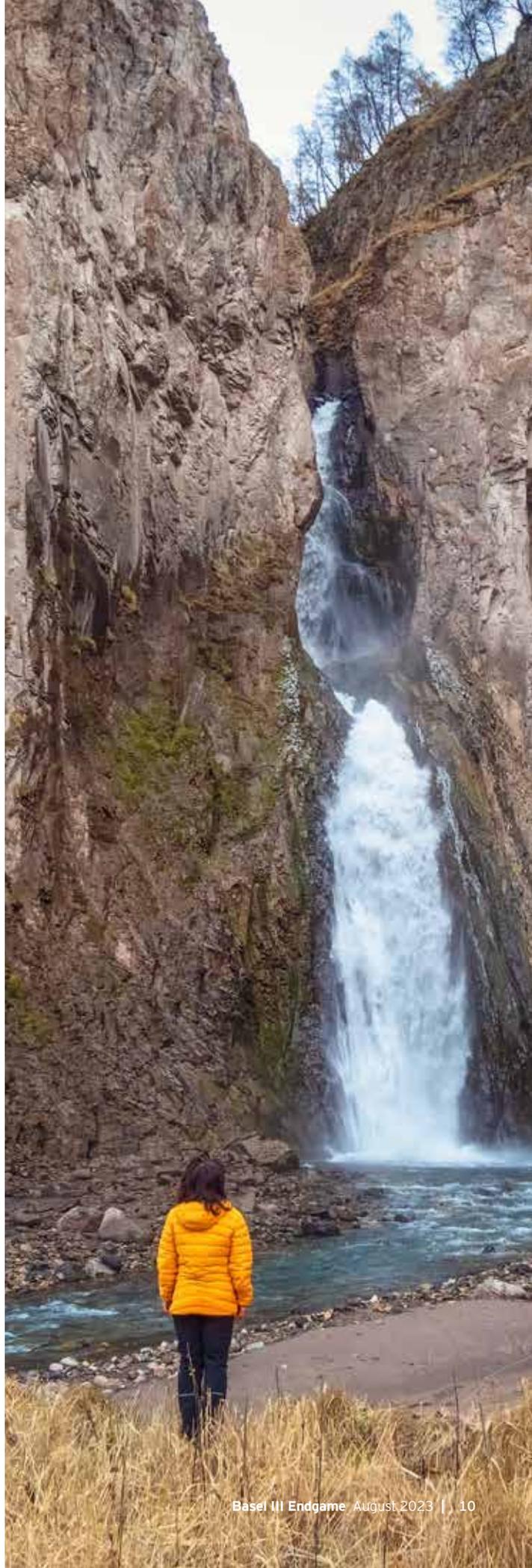
The NPR requires all large banks with assets of \$100b or more to use SA-CCR for US SA, ERBA and supplementary leverage ratio (SLR) calculations as well as reporting on the Systemic Risk Report (FR Y-15). Additionally, all large banks will be required to comply with SCCL limits daily using SA-CCR exposure calculations.

In addition to the expanded applicability of SA-CCR, the NPR includes technical revisions and clarifications related to collateral held by a qualifying central counterparty (QCCP), collateral held in bankruptcy-remote manner, supervisory delta for collateralized debt obligation (CDO) tranches and options contracts, and decomposition of indices. Some of the collateral haircut amounts will also be greater for margined netting sets of derivatives due to the changes the NPR proposes to the haircut schedule.

#### **6. Revisions to operational risk**

The NPR introduces the SMA to replace the current AMA. Additionally, non-AMA banks above \$100b are subject to operational risk capital requirements. The SMA calculation uses a combination of financial statement components (typically a three-year average) and 10-year internal loss history:

- ▶ **Business indicator component (BIC):** This is a financial statement proxy of operational risk exposure, along with bank-specific operational loss data. This will require banks to design their ledgers and reporting systems to ensure they are appropriately classifying their revenues, expenses and trading P&L in a manner consistent with the SMA requirements.
- ▶ **Loss component:** The internal loss multiplier (ILM) is used to enhance the SMA's risk sensitivity and provide an incentive for banks to improve operational risk management. Key loss data NPR differences compared to AMA include the use of net loss (inclusive of recoveries) vs. gross loss and timing losses in capital calculation. Although the treatment proposed by the BCBS permits the ILM floor to go below one, the Agencies have set the floor at one. Banks will be required to have a robust internal loss data program, inclusive of an independent review of comprehensiveness and accuracy of loss data to support SMA and disclosure requirements.



## FRTB market risk

The FRTB represents an overhaul of the current US Basel 2.5 market risk regulatory capital framework. This revised market risk capital framework encompasses four key features:

- ▶ A redefined boundary between the trading book and banking book

- ▶ A more risk-sensitive standardized approach
- ▶ An enhanced model approval process
- ▶ An updated IMA that better captures tail risk and integrates the risk of market illiquidity

The US NPR FRTB standards include modifications to the BCBS proposed framework, the majority of which are expected to reduce the level of implementation effort and or lessen the capital impact relative to BCBS FRTB:

- ▶ More flexible desk-level model approval options, potentially reducing the required data collection timeline for initial application and desk changes after go-live
- ▶ Removal of IMA default risk charge (DRC), consistent with the removal of modeling in the credit risk framework, replaced by SA DRC for model-eligible desks; although this could increase RWA for certain portfolios, it will also eliminate the need to expand model coverage and desk restructuring to avoid certain instruments hard to model in DRC (e.g., local currency sovereigns)
- ▶ Generally preferential treatment for US government-sponsored enterprises (GSEs) in SA (e.g., lower loss given default (LGD), exclusion from residual risk add-on), but with one clarification that could increase the impact from previous estimates
- ▶ Other changes to SA that were expected to have significant capital impact or operational costs (e.g., reduce maturity mismatch impact for equities in DRC; remove spread options and GSE mortgage-backed securities (MBS) from residual risk add-on (RRAO); allow flooring of credit spreads at zero for curvature; combine power and gas into one bucket for increased hedge recognition)
- ▶ Clarifications or changes to "covered positions" definition (e.g., explicit threshold and reduced frequency for net short credit/equity exposure analysis; retain term "restyle transaction election" in current US rules; removal of internal risk transfer requirement for equities)
- ▶ More flexibility or relaxed standards for certain components of IMA (e.g., de minimis securitizations and correlation trading portfolio (CTP) may be in model-eligible desks; new issuances may use prorated risk factor eligibility test (RFET); more flexibility for proxy usage in non-modellable risk factors (NMRF) capital charge; eliminates certain data principle requirements)





### Trading/banking boundary and trading desks

The US NPR establishes a stringent set of requirements for the trading book and banking book boundary, and in doing so, remains mostly consistent with the BCBS international standards' intention to establish a consistent implementation across the industry. The changes to the framework include increased guidance for specific types of instruments/risks, stricter governance requirements, and clearer guidance for internal trades.

Although the US NPR is very similar to the BCBS guidance, there are key US-specific differences:

- ▶ Inclusions/exclusions
  - ▶ Clarifies inclusion of trading assets and liabilities as defined by existing regulatory reports
  - ▶ No explicit exclusion of retail and small or medium-sized enterprise (SME) credit
  - ▶ Preserves current choice to include term "repo-style transactions," with some additional criteria (i.e., marked to market and clarification on scope of risks to be captured and capitalization approach), rather than requiring trading-related repos to be included
  - ▶ Explicit exclusion of debt security where fair value option is selected
- ▶ Net short credit/equity exposure: Introduced notional based threshold (\$20m) for quarterly identification and inclusion in market risk capital measurement.
- ▶ Internal risk transfer (IRT): The proposed rule does not include requirements for equity IRTs that restrict the recognition of risk mitigation benefits for equity IRTs between trading book and banking book.
- ▶ Re-designation: Maintains requirements for capital add-ons for re-designation, where an organization reclassifies an instrument initially designated as trading book or banking book; however, it introduces a requirement to notify regulators of material re-designation within 30 days (rather than requiring prior approval) and allows for no capital add-on for re-designations outside of the bank's control, subject to regulatory approval.
- ▶ IMA ineligible positions on IMA desks: Allows the inclusion of de minimis securitization, correlation trading and equity investment in funds with no look-through on desks using IMA, provided a separate SA capital add-on is calculated.
- ▶ De minimis fallback: Preserves current de minimis framework as a fallback when banking organizations are unable to perform the capital charge calculation using either SA or IMA.
- ▶ Internal reporting: Did not include requirements for weekly desk-level risk management reporting of profit and loss (P&L), VaR, expected shortfall (ES), backtesting and p-value; however, it includes a requirement for daily monitoring of such information at the desk level. Additionally, the NPR did not include explicit requirements for certain reports, such as daily limit reports on exposures, breaches and actions or on intraday limits and utilization, but the NPR does require policies and procedures related to the monitoring of such exposures.

## 7. FRTB internal models approach (IMA)

The IMA framework has been redesigned under FRTB to create a more coherent and comprehensive risk capture that takes better account of “tail risks” and market illiquidity risk; establish a more granular and standardized model approval process whereby internal models are approved for use at the trading desk level; and impose constraints on the capital-reducing effects of hedging and portfolio diversification due to uncertainty. The redesigned internal models approach replaces VaR and stressed VaR with a single stressed expected shortfall measure, eliminating a perceived double count; creates a new framework for identifying capitalizing material risks that do not have enough observable prices to be included in the model, NMRF, and eliminates the incremental risk charge and comprehensive risk measure, replacing them with standardized measures of default risk.

The following aspects of the US NPR provide supervisors and banks more flexibility in the model approval process and certain modeling choices than the BCBS framework:

- ▶ **Initial model approval:** There is more flexibility for initial model approval and approval after go-live for additional desks or modified desks, such as:
  - ▶ No explicit requirement for an initial IMA desk's materiality to exceed 10% of market RWA
  - ▶ Three additional options included for trading desks' initial submission, if unable to meet the 250-business-days requirement in backtesting and PLAT
- ▶ **PLAT and backtesting:** Overall these requirements are in line with BCBS, but there were a few changes to improve the use of IMA for desks, such as:
  - ▶ Recovery from Red to Amber (instead of Green) is sufficient to move back to IMA for approved IMA desks.
  - ▶ Prorates exceptions count on available data points in traffic light approach (if it is shorter than one year).
  - ▶ Allows discounting of backtesting exceptions if the bank can show they are related to NMRF and the scaled capital requirement for NMRF exceeds the difference between VaR and the appropriate P&L.
- ▶ **Hypothetical P&L (HPL) and Risk-Theoretical P&L (RTPL) definitions:** There is limited clarification on certain key interpretive items in the definition of HPL and RTPL, with some potential divergences from more detailed EU and UK guidance:
  - ▶ Language about consistent treatment of time effects between HPL and RTPL is retained, implying banks have a choice, but the definition of HPL excludes time effects, creating a potential conflict.
  - ▶ Valuation adjustments that are updated daily must be included in HPL, potentially not granting the flexibility to align with VaR and RTPL provided in the EU and UK.
  - ▶ There is no explicit guidance on the treatment of residual operational noise or the use of end-of-day valuation processes, potentially leaving room for interpretation on usage of front office flash vs. finance-approved HPL.

- ▶ **RFET:** Standards remain largely consistent with a change for new issuances and potentially some additional leniency:
  - ▶ Now may prorate to meet standards if less than one year of trading history.
  - ▶ Replaces language to “extract” the value of the risk factor with “inform,” though still open to interpretation on requirements, particularly extent to which one price can be mapped to multiple risk factors.
- ▶ **DRC:** IMA DRC is replaced by SA DRC for model-eligible desks.
- ▶ **ES:** Two important clarifications that could reduce compute and simplify operations:
  - ▶ Introduces an option of direct method to calculate ES without defining reduced set, although standards for approval to include proxied risk factor in full set remain uncertain.
  - ▶ With approval, NMRF can be included in ES (in addition to a separate NMRF charge).



- ▶ **Equity investment in funds:** The US NPR is generally consistent with BCBS guidance on performing look-through, but with the following clarifications:
  - ▶ Must identify underlying exposure on only a quarterly basis.
  - ▶ Allows use of (1) look-through approach, (2) hypothetical portfolio approach, or (3) subject to prior approval, an alternative approach defined by the bank (consistent with UK consultation), potentially allowing banks to avoid look-through.
- ▶ **NMRF:** Is consistent with BCBS guidance but more flexible than the European Banking Authority Regulatory Technical Standard, with specific clarifications:
  - ▶ Allow usage of proxy and or backfilled data to calculate SES.
  - ▶ Must select stress period relevant to NMRF.
- ▶ **Data principles:** The NPR has simplified language, with fewer details on controls and a few changes:
  - ▶ Offers less restrictive guidance on proxy usage, particularly for the stress period.
  - ▶ Removes requirement to reconcile front-office and back-office prices with ES market data but kept requirement to reconcile real price observations and ES market data.
  - ▶ Removes requirement for biweekly recalibration of regression parameters.

## 8. FRTB standardized approach (SA)

As part of the overhaul of market RWA, the US NPR introduces a new standardized approach (SA) covering general market risk, specific market risk and default risk. The calculation consists of three components: the sensitivity-based method, the default risk charge and the residual risk add-on.

While the US NPR generally aligns with the BCBS on the structure of the SA, there are changes that reflect tailoring for US markets and key points of industry advocacy.

Key deviations in the NPR from BCBS guidance include:

- ▶ **Frequency:** Requires weekly calculation as opposed to monthly.
- ▶ **US sovereigns and GSEs:** Provides more favorable treatment for US sovereigns and GSEs in DRC and RRAO compared to BCBS, but with one clarification for the sensitivities-based method (SBM) that could increase previous capital estimates:
  - ▶ **DRC:** exclusion of US sovereigns, lower LGD for GSEs, and maturity matching between to-be-announced securities and pools in DRC
  - ▶ **RRAO:** exclusion of GSE MBS from RRAO
  - ▶ **SBM:** clarified treatment of Fannie, Freddie and UMBS as separate issuers with standard intrabucket correlation for the same issuer (35%)
- ▶ **Equities maturity mismatch:** Allows equity cash to use maturity matching against derivatives it hedges in DRC.
- ▶ **Commodities buckets:** Combines power with natural gas and creates a separate bucket for carbon trading.
- ▶ **Spread options:** Excludes spread options with only two underliers from RRAO, benefiting constant maturity swaps, yield curve options and others.
- ▶ **Risk factor definitions and sensitivities:** Modifies risk measure definitions to simplify or provide more flexibility, including more flexibility for vega (e.g., sticky delta/strike, implied vs. ATM), no vega requirement for callable/puttable bonds, flooring of negative credit spreads for curvature, and election to include linear products in curvature at desk level (not firmwide as in other jurisdictions).



- ▶ **Buckets and risk weights:** Includes minor changes and clarifications to bucketing and risk weights (e.g., introduces liquid market criteria for equities, confirms use of internal ratings for credit spread risk (CSR) bucketing, introduces speculative and sub-speculative-grade terminology for CSR and DRC, and adds higher risk weights for sovereigns and MDBs for CSR).
- ▶ **Indices, equity investments in funds and multi-underliers:** Largely adopts the BCBS guidance, but with the following clarifications:
  - ▶ The choice of look-through must be consistent for all exposures to the same index, potentially causing complexity for decomposition of structured vs. vanilla products referencing the same index.
  - ▶ Underlier data for equity investments in funds may be updated on a quarterly frequency.
  - ▶ Allows look-through of indices in CTP portfolio for SBM calculation, enabling significantly better single-name hedging recognition.
- ▶ **CVA model, review and governance:** There are no material changes on the modeling methodologies and the review and governance process, but a few minor changes, including:
  - ▶ Market data (current and historical) may be “validated” independently from the lines of business rather than “acquired” in BCBS.
  - ▶ In cases where banks use fundamental credit analysis to proxy the credit spread of an illiquid counterparty, explicit regulatory preapproval is required.
  - ▶ There are no specific requirements on a credible track record of using exposure models and netting uncertainty.
  - ▶ There are more prescriptive ongoing validation and audit frequency requirements (at least annually).
- ▶ **Internal CVA hedges for BA-CVA:** CVA desk is required to recognize internal CVA hedges under the BA-CVA approach.

## 9. Revisions to CVA risk framework

The revised CVA risk framework aims to achieve enhanced risk sensitivity, improved hedge recognition, and better consistency with accounting CVA and the FRTB market risk framework. This new requirement will replace the current Basel III counterparty exposure at default (EAD) and the VaR-based framework with two alternative approaches to calculating CVA risks:

- ▶ **Standardized Approach (SA-CVA):** a sensitivity-based calculation similar to the FRTB SA for capitalizing market risk, requiring supervisory approval.
- ▶ **Basic Approach (BA-CVA):** an exposure-based calculation, in which EAD is calculated in the same way as the bank calculates its minimum capital requirements for counterparty credit risk, similar to the current simple CVA approach in US Basel III.

The CVA framework in the NPR is very similar to the BCBS guidance, but it includes the following changes:

- ▶ **Covered transactions:** All derivatives that are directly facing a CCP (including those against non-QCCP) and SFTs are excluded; banks may choose to exclude credit derivatives recognized as credit risk mitigants for credit RWA.
- ▶ **Buckets and risk weights:** Consistent with FRTB SA, this framework proposes minor changes to bucketing:
  - ▶ Introduces liquid market criteria for equities to determine advanced economies.
  - ▶ Confirms use of internal ratings and introduces speculative and sub-speculative-grade buckets for CSR bucketing.
  - ▶ Combines power and natural gas into one bucket and makes carbon trading its own bucket.
  - ▶ Increases risk weights for sovereigns and MDBs.



## 10. Regulatory reporting requirements

The Regulators will separately propose updates to several regulatory capital-related reporting forms, such as the Regulatory Capital Reporting for Institutions Subject to the Advanced Capital Adequacy Framework (FFIEC 101), the Market Risk Regulatory Report for Institutions Subject to the Market Risk Capital Rule (FFIEC 102) and the Consolidated Financial Statements for Holding Companies (FR Y-9C). The Capital Assessment and Stress Testing forms (FR Y-14A/Q) will similarly be updated to reflect the changes in the final rule. For the updated Systemic Risk Report (FR Y-15), which is the source of inputs to the G-SIB framework, the updates in the G-SIB NPR would be reflected to amend the reporting form and instructions.

Under the current capital rule, only Category I and Category II banking institutions are subject to enhanced public disclosures for the advanced approach. The NPR would require Category III and Category IV banking institutions to meet the same disclosure requirements under ERBA, which is aligned to the existing standardized approach Pillar 3 disclosures required of banks over \$50b. However, most of the existing quantitative disclosures would be removed from the proposed disclosures and instead are expected to be included in regulatory reporting forms. Regulatory reporting engines will need to be ready in anticipation, though the specific changes have not been finalized. Additional qualitative disclosures are introduced to capture the new components of ERBA, such as CVA and operational risk, and the existing disclosures are enhanced to include a broader discussion of the bank's risk management objectives, including the interaction between the business model and the overall risk profile, the risk governance structure, qualitative information on stress testing, and strategies and processes to manage, hedge and mitigate risks.



## Next steps



B3E will require collaboration across the whole institution to implement the requirements correctly, efficiently and in a manner that does not result in the bank holding unnecessarily higher capital. Some banks have already moved forward with components of their B3E program and will use the NPR to adjust what they have built already. These firms will want to quickly identify which elements of the proposal depart from what they have expected so far and adjust their planning and development to account for these differences in order to keep their program moving forward.

Other banks are at the start of their journey and focused on the initial steps. These banks should quickly mobilize to identify the necessary stakeholder teams and their roles in implementing the new requirements and be grounded in the bank's existing activities and exposures. It is important to select and empower an executive that can provide a vision for the program and establish its structure and culture. These steps are also critical in capturing the B3E program in the bank's budgeting process and informing internal IT teams of future resource needs. Firms at this stage of their program will want to quickly consider the following near-term steps:

- ▶ Identify the appropriate steering committee, working groups and members leveraging BAU governance and develop charters
- ▶ Establish or expand program management, including communication and status reporting protocols, project initiation documents, project plans, resource plans and other key artifacts
- ▶ Perform a gap assessment of the bank's current capabilities to the rule requirements and existing data, an accessibility analysis, and identify ways to address these, particularly for the upcoming data collection exercises

- ▶ Identify elements of the requirements that may require analysis and interpretation
- ▶ Assess the capital impact associated with the changes and develop a perspective to articulate during the comment period for engagement with other industry participants and regulators
- ▶ Formalize workstreams with clear objectives, owners and milestones
- ▶ Draft a target operating model that accounts for both gaps to reach minimum compliance and enhanced capabilities to support business needs
- ▶ Identify the budget impact and include B3E needs in business, finance, risk, reporting, accounting, technology and other functional area forecasts

B3E represents a sea change for the US banking industry and navigating these changes will require each bank to understand its own starting point, current capabilities and objectives relative to its businesses and strategy. The initial steps outlined above can guide firms starting down this path, but building a strong regulatory capital program with the necessary governance, oversight, technology, data, processes and controls through the B3E implementation will require a committed effort from across the institution to execute on the remaining steps needed for the program.

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