January 16, 2024

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Re: Regulatory capital rule: Amendments applicable to large banking organizations and to banking organizations with significant trading activity

Federal Reserve: Docket No. R-1813, RIN 7100-AG64
FDIC: RIN 3064-AF29
OCC: Docket ID OCC-2023-0008

Dear Sir/Madam,

The International Swaps and Derivatives Association, Inc. ("**ISDA**") and the Securities Industry and Financial Markets Association ("**SIFMA**" and, together with ISDA, the "**Associations**") welcome the opportunity to comment on the proposal referenced above (the "**Proposal**") issued by the Board of Governors of the Federal Reserve System (the "**Federal Reserve**"), the Federal Deposit Insurance Corporation (the "**FDIC**") and the Office of the Comptroller of the Currency (the "**OCC**" and, collectively with the FDIC and the Federal Reserve, the "**Agencies**").

This letter highlights issues arising from the Fundamental Review of the Trading Book ("**FRTB**" or "**market risk**"), credit valuation adjustment ("**CVA**") risk and, with respect to counterparty credit risk ("**CCR**"), aspects of the Proposal relating to securities financing transactions ("**SFTs**") and derivatives. These aspects of the Proposal and the Proposal more generally—in conjunction with the Federal Reserve's stress testing regime and the capital surcharge imposed on U.S. global systemically important banking organizations ("**GSIBs**" and the "**GSIB**

Surcharge")[1]—would, collectively, impose excessive capital requirements that are not aligned with underlying risk, and negatively affect companies, consumers and savers who benefit directly or indirectly from bank involvement in U.S. capital markets.[2]

While we appreciate the revisions to the Basel Committee standards for FRTB and CVA risk that the Agencies have proposed, we continue to be very concerned that the proposed 129 percent increase in FRTB and CVA capital requirements is not supported by any detailed analysis from the Agencies.[3] In fact, the Agencies note that "the overall effect of higher capital requirements on market making activity and market liquidity remains a research question needing further study."[4] This underscores the necessity of further careful analyses of the impact on end-users of all types prior to finalization. Federal Reserve Chair Powell rightly acknowledged the risks of substantial increases in capital requirements for trading activities, noting that, as a result of the proposed risk-weighted assets ("**RWA**") increases for market risk, large U.S. banking organizations "could reduce their activities in this area, threatening a decline in liquidity in critical markets and a movement of some of these activities into the shadow banking sector."[5]

The results of our QIS show that there is a significant increase in RWA impact for capital markets when comparing the current standardized approach to the ERBA.

To inform our comments on the potential effects of the Proposal, the Associations conducted an in-depth quantitative impact study ("**QIS**") with input from the eight U.S. GSIBs.

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1 12 C.F.R. Part 217, Subpart H.

2 The Agencies estimate that "the increase in RWA associated with trading activity (market risk RWA, CVA risk RWA, and attributable operational risk RWA) would be around $880 billion for large holding companies," which represents a 157 percent increase in RWAs for trading activities. 88 Fed. Reg. at 64,170. This 157 percent increase is relative to the current standardized approach, which does not include CVA risk RWAs or operational risk RWAs and is calculated as the quotient of the estimated $880 billion increase in RWAs associated with trading activity over the $560 billion in RWAs for market risk under the current standardized approach identified in the Proposal.

3 Under the current U.S capital rules, the U.S. standardized approach generally is the binding capital constraint for large banking organizations. It includes capital requirements for market risk and credit risk. The proposed expanded risk-based approach ("**ERBA**") under the Proposal would include capital requirements for CVA risk and operational risk in addition to market risk and credit risk. The ERBA, as opposed to the standardized approach, is generally expected to be the binding capital constraint going forward. Table 1 demonstrates that the total market risk and CVA risk RWA under the current standardized approach and ERBA, respectively, equals $383 billion and $877 billion – an increase of 129 percent.

4 FDIC, Federal Reserve, OCC, Regulatory Capital Rule: Large Banking Organizations and Banking Organizations with Significant Trading Activity, 88 Fed. Reg. 64,028, 64,170-71 (Sept. 18, 2023).

5 Statement by Chair Jerome H. Powell, July 27, 2023, *available at* https://www.federalreserve.gov/newsevents/pressreleases/powell-statement-20230727.htm.

Table 1: Summary of QIS Results - Comparing Current Standardized RWA[6] to ERBA[7,8]

	Current Standardized ($bn)	NPR Estimate for ERBA		Mitigation Estimate	Mitigated RWA
		($bn)	(%)	($bn)	($bn)
Market Risk (FRTB IMA & SA)	383[9]	661[10] [a]	73%	186 [b]	474[11]
CVA		217[12]		50 [c]	167[13]
SFTs	486[14]	574[15]	18%	282 [d]	291[16]
Derivatives CCR	700[17]	680[18]	-3%	124 [e]	556[19]

6 References to the current standardized approach relate to capital requirements calculated using total standardized RWA (inclusive of market RWA). Current standardized RWA are used as the baseline for comparison because they are generally binding given that SCB requirements currently apply to standardized approach but not advanced approaches capital ratios.

7 The "Mitigation Estimate" and "Mitigated RWA" figures provided in Table 1 and Table 2 address only a subset of the Associations' recommendations regarding the Proposal in light of data availability, resource constraints and related considerations. In addition, the QIS does not reflect operational risk RWA attributable to operational risk. Accordingly, the RWA figures presented from the QIS understate the RWA attributable to trading and capital markets activity under the Proposal because these figures do not reflect operational risk RWA.

8 ERBA would allow for a more risk-sensitive SFT exposure methodology and would assign a preferential risk weight for certain investment grade entities. As a result, an overall reduction in SFT RWA would be expected under ERBA.

9 See Appendix 8 – Quantitative Impact Study Results, Index TB_01.

10 See Appendix 8 – Quantitative Impact Study Results, Index TB_01a.

11 See Appendix 8 – Quantitative Impact Study Results, Index TB_02.

12 See Appendix 8 – Quantitative Impact Study Results, Index TB_03.

13 See Appendix 8 – Quantitative Impact Study Results, Index TB_03a.

14 See Appendix 8 – Quantitative Impact Study Results, Index TB_04.

15 See Appendix 8 – Quantitative Impact Study Results, Index TB_04a.

16 See Appendix 8 – Quantitative Impact Study Results, Index TB_05.

17 See Appendix 8 – Quantitative Impact Study Results, Index TB_06.

18 See Appendix 8 – Quantitative Impact Study Results, Index TB_06a.

19 See Appendix 8 – Quantitative Impact Study Results, Index TB_07.

Table 2: Summary of FRTB Impacts for Modelled compared to Standardized Only Approach

	Current Standardized ($bn)	NPR Estimate for ERBA		Mitigation Estimate	Mitigated RWA
		($bn)	(%)	($bn)	($bn)
Market Risk (FRTB-SA Only)	383	811[20]	112%	258 [f]	552[21]
Market Risk (FRTB IMA & SA)	383	661 [a]	73%	186 [b]	474

[a] FRTB IMA RWA is calculated assuming current model approval.

[b] See Section II Industry QIS Results for further details on mitigating items for FRTB IMA.

[c] See Section VI Industry QIS Results for further details on mitigating items for CVA.

[d] See Section IV Industry QIS Results for further details on mitigating items for SFTs.

[e] See Section VII Industry QIS Results for further details on mitigating items for SA-CCR.

[f] See Section I Industry QIS Results for further details on mitigating items for FRTB SA.

The results of the QIS show:

- an increase of 112 percent[22] in market risk RWA under the proposed FRTB-SA[23] and 73 percent[24] under the proposed FRTB-IMA & SA (assuming current model approvals) when comparing the proposed FRTB to the current capital rules.
- CVA RWA is fully additive to the binding capital constraint since the proposed ERBA includes CVA RWAs whereas the current standardized approach does not.[25]
- an increase of 18 percent[26] in SFT RWA under the proposed ERBA when comparing the proposed ERBA to the current standardized approach.

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20 See Appendix 8 – Quantitative Impact Study Results, Index TB_08.

21 See Appendix 8 – Quantitative Impact Study Results, Index TB_08a.

22 See Appendix 8 – Quantitative Impact Study Results, Index TB_09.

23 The increase of 112 percent in market risk RWA under the proposed FRTB-SA in comparison to the current capital rules would reduce to 93 percent excluding the impact of the issue relating to the treatment of GSE exposures described above (*See* Appendix 8 – Quantitative Impact Study Results, Index TB_10).

24 See Appendix 8 – Quantitative Impact Study Results, Index TB_11.

25 Under the current U.S. capital rules, the standardized approach—which does not include CVA risk capital—is generally the binding constraint for the eight U.S. GSIBs due to higher RWA and the application of the SCB. Under the Proposal, the Associations expect that ERBA—which would include CVA risk capital—will be the new binding constraint for most U.S. GSIB given the increase in capital requirements under this capital stack and the proposed application of the SCB to ERBA.

26 See Appendix 8 – Quantitative Impact Study Results, Index TB_12.

Companies of all types and sizes rely on U.S. capital markets for a range of essential services, the availability and cost of which have a profound effect on U.S. economic growth and the well-being of American businesses and households. Large banking organizations serve as critical intermediaries, supporting the health and vibrancy of the U.S. capital markets by providing financing, market making and hedging services to a wide range of clients ranging from corporates to asset managers and smaller banks. The material capital increase for these products will ultimately feed through to a broad range of consumers and savers, all of whom benefit from lower cost of credit, stable prices for goods and services and opportunities to invest cost effectively in liquid and dynamic markets.

In particular, American companies rely more heavily on capital markets funding than traditional bank lending, in contrast to every other major jurisdiction as reflected in **Figure 12** of Appendix 1. Capital markets play a critical role in economic growth, providing 71.9 percent of equity and debt financing for non-financial corporate issuers.[27] Debt capital markets account for 75 percent of total financing in the United States, compared to an average of 21.3 percent for other regions.[28] The predominance of capital markets financing has been a key contributor to U.S. economic growth, as it provides a source of deep and flexible funding, thereby supporting a dynamic and innovative economy. The role of banking organizations, particularly GSIBs, as intermediaries in certain key product markets is significant, as reflected in the data set forth below in **Table 11** of Appendix 1. Therefore, we urge the Agencies to carefully review our comments as part of a broader evaluation of the U.S. bank capital framework and to proceed cautiously in considering changes to the capital framework.

To avoid the adverse effects of the Proposal on U.S. capital markets and, therefore, businesses, consumers, investors and the broader U.S. economy, (1) the capital markets components of the Proposal must be revised materially and (2) other aspects of the overall design of the U.S. capital framework need to be substantially overhauled. If these changes cannot be accomplished without further consultation, a re-proposal may be necessary.

An Executive Summary that explores the overarching themes, considerations and recommendations is immediately below. Parts I-VII of this letter address the Associations' comments on aspects of the Proposal relating to FRTB, CVA risk, collateral recognition, the proposed minimum haircuts for SFTs, and other CCR matters. The Appendices to this letter

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[27] SIFMA, US Capital Markets Are the Largest in the World: 2023 Capital Markets Fact Book (2023), *available at* *https://www.sifma.org/wp-content/uploads/2022/07/2023-SIFMA-Capital-Markets-Factbook.pdf*.

[28] SIFMA, *US Capital Markets Are the Largest in the World: 2023 Capital Markets Fact Book* (2023), *available at* *https://www.sifma.org/wp-content/uploads/2022/07/2023-SIFMA-Capital-Markets-Factbook.pdf*. In this regard, it is noteworthy that the European Union ("**EU**") is seeking to enhance the functioning of its capital markets. Council of the European Union, Capital Markets Union, *available at* https://www.consilium.europa.eu/en/policies/capital-markets-union/#package. The Council of the EU has stated broadly that "developed and integrated capital markets are a necessity to complement a solid EU banking sector in providing funding, as they help to diversify the funding mix of European enterprises, thereby supporting the European economy." Council of the European Union, *Council Conclusions on the Deepening of the Capital Markets Union* (Dec. 5, 2019), *available at* https://data.consilium.europa.eu/doc/document/ST-14815-2019-INIT/en/pdf.

contain responses to certain questions from the Proposal, map the recommendations and comments in Part I-VII to those questions and provide other comments and recommendations.

Executive Summary

A comprehensive evaluation of how the Proposal would interact with other prudential requirements, particularly the stress testing framework and the GSIB Surcharge (and related calibration), is needed.

Banking organizations manage their capital based on the overall amount of capital required across minimum requirements and buffer requirements. Due to the market, reputational, supervisory and regulatory consequences of breaching a buffer requirement, as a practical matter, a buffer requirement is the functional equivalent of a minimum requirement. When assessing the economic returns of particular products, transactions or activities, banking organizations consider the aggregate amount of capital that must be allocated to the product, transaction or activity, taking into account minimum capital and buffer requirements. The central policy question presented by the Proposal is therefore how much capital banking organizations should be required to maintain for trading and capital markets activities. The Proposal would significantly increase the RWAs for trading and capital markets activities, increasing the amount of capital banking organizations must maintain to satisfy both minimum capital requirements and buffer requirements. But the Proposal would not change the framework for, or calibration of, regulatory buffer requirements for these activities, including, for example, how the global market shock and large counterparty default components in the supervisory stress tests (collectively, the "**GMS**") factor into stress capital buffer ("**SCB**") calculations.[29] As a result, the Proposal reflects a policy choice to significantly increase capital requirements for trading and capital markets activities, even though the Agencies, by their own admission, have not fully assessed the impact on businesses, consumers and savers and cite no evidence that the current framework has resulted in an undercapitalization of trading and capital markets activities.

Under the Proposal, the overall risk-based capital requirements for trading and capital markets activities would be established through the combination of the calculation of market risk, CCR, CVA and operational RWA using ERBA. This is in addition to the Federal Reserve's supervisory stress test and SCB requirements[30] and, for GSIBs, the GSIB Surcharge.[31] Notably, banking organizations with significant trading and capital markets activities are subject to the GMS, which has a substantial effect on stress test losses and SCB requirements. Trading and capital markets activities of banking organizations already affect GSIB Surcharge scores and the Federal Reserve's separate proposal revising aspects of the GSIB Surcharge[32] would further increase the impact of trading and capital markets activities on scores and surcharges, with significant implications for clearing activities in particular.

Furthermore, the use of supervisory stress testing in the SCB framework and the most punitive aspect of the GSIB Surcharge—the Method 2 calculation—are unique to the United States and do not necessarily have direct equivalents in foreign jurisdictions. Implementing the Proposal

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29 12 C.F.R. § 252.54(b)(2).

30 12 C.F.R. § § 217.11(a)(2)(vi) and 225.8(f)(2).

31 12 C.F.R. Part 217, Subpart H.

32 Federal Reserve, Regulatory Capital Rule: Risk-Based Capital Surcharges for Global Systemically Important Bank Holding Companies; Systemic Risk Report (FR Y-15), 88 Fed. Reg. 60,385 (Sept. 1, 2023).

without considering or addressing the overall capital requirements for trading and capital markets activities across all aspects of the U.S. bank capital framework therefore would further exaggerate the asymmetry of capital requirements in the United States, especially for GSIBs, as compared to other major jurisdictions.

Significant increases in capital requirements, such as those contemplated by the Proposal, could force banking organizations to consider altering the size and composition of their balance sheets and potentially ceasing activities that become non-economic. The availability and cost of products and services and market liquidity consequently would be impacted, negatively affecting a broad range of corporate and individual end-users including investors, savers and consumers broadly. Higher capital requirements would reduce capacity for banking organizations to be flexible in addressing supply and demand imbalances, particularly in times of market stress, which could force central banks to suspend rules temporarily or intervene directly in markets more frequently as the lender or liquidity provider of last resort.

The Proposal would have a negative effect on the liquidity and vibrancy of capital markets.

Large U.S. banking organizations are vital to the functioning of the U.S. capital markets, which are the largest and most liquid in the world. They are the most consistent providers of these necessary services through the economic cycle; many non-banks become less active in the capital markets during times of stress.[33] The Proposal could potentially further reduce the balance sheet capacity of U.S. banking organizations to support these important markets.

Regulatory capital constraints can hamper the ability of banking organizations to serve effectively as intermediaries, reducing the flexibility and capacity of dealer balance sheets.[34] If banking organizations that act as funding providers, market makers and hedge providers experienced substantially higher capital requirements for these activities under the Proposal, then the cost of holding inventory and maintaining the capacity to facilitate transactions for their clients would necessarily increase. This will ultimately lead to less vibrant and liquid capital markets, making it harder and more costly for businesses or individuals to obtain funding, hedge risk and save for the future, which will negatively affect economic growth.

Accordingly, to maintain the liquidity and vibrancy of the U.S. capital markets, the Agencies should make the following critical revisions to how banking organizations can recognize risk diversification when calculating market RWAs under ERBA to be better aligned with actual risk exposure and effective risk management practices.

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[33] See, e.g., Inaki Aldasoro, Sebastian Doerr, Haonan Zho, *Non-bank lending during financial crises* (Jan. 2022), *available at* https://www.fdic.gov/analysis/cfr/bank-research-conference/annual-21st/papers/zhou-paper.pdf.

[34] This trend has been clearly observed in the U.S. Treasury markets where the total size of primary dealer balance sheets per dollar of U.S. Treasuries outstanding has shrunk by a factor of nearly four since 2007. See Darrell Duffie, *Resilience Redux in the U.S. Treasury Market* (Aug. 25, 2023), *available at* https://www.kansascityfed.org/Jackson%20Hole/documents/9726/JH_Paper_Duffie.pdf; see also Nellie Liang and Pat Parkinson, *Enhancing Liquidity of the U.S. Treasury Market Under Stress*, BROOKINGS INSTITUTION (Dec. 16, 2020), *available at* https://www.brookings.edu/wp-content/uploads/2020/12/WP72_Liang-Parkinson.pdf.

Improve recognition of diversification	- Across asset classes in the standardized approach - Across asset classes in the modelled approach - Between modelled and non-modelled risk factors in the modelled approach - Between trading desks using the standardized approach and modelled approach

In addition, the Associations stress the importance of vibrant secured financing markets as well as securities borrowing and lending markets. Secured financing provides the means to exchange funds in a low-risk and secured manner—which is a prerequisite for liquid securities markets—and allow market participants to take views on financial instruments, enhancing price discovery. Secured financing markets are also essential for benchmarks used throughout the capital markets, as reflected in the transition from interbank funding rates to alterative risk-free rates. Therefore, the following key elements of the Proposal related to SFTs need to be removed or revised.

SFT minimum haircut floor framework	Remove the SFT haircut floor framework in line with major foreign jurisdictions, which would also eliminate conflict with pre-existing broker-dealer regulations.[35]
Collateral recognition	Retain the ability to recognize the risk-mitigating effects of: - Investment grade corporate debt securities regardless of whether the corporate issuer (or its parent) has a publicly traded security outstanding - Non-investment grade corporate debt securities of term repo-style transactions by not requiring to include them in the market risk measure - Clarify that the netting set formula applies to eligible margin loan transactions booked as a single unit of account for GAAP and also permit it for single repo style transactions with multiple securities as collateral.
Market price volatility haircuts	Reduce market price volatility haircuts for U.S. Agency debt to be better aligned with underlying price risk.
Sovereign exposures	The minimum haircut requirement, if implemented, should not apply to SFTs with underlying sovereign collateral, including, U.S. sovereign collateral regardless of technical defaults.

The Proposal would increase capital requirements for markets where that outcome would not be aligned with underlying risks.

Many segments of the capital markets—including corporate, agency and sovereign debt markets and equity markets, securitization markets, and SFT markets—would be adversely affected by the proposed higher capital requirements under the Proposal. And, as written, many types of issuers—including corporates, sovereigns, government-sponsored enterprises ("**GSEs**") and municipalities and other public sector entities ("**PSEs**")—would face negative effects regarding the cost of funding in a way that is not aligned with the risks. As a consequence, consumers could experience increased costs across a significant range of goods and services. For example, higher funding costs for GSEs as a result of increased capital requirements for GSE exposures could result in increased housing finance costs, while lower liquidity for agency residential

[35] Exchange Act Rule 15c3-3, 17 C.F.R § 240.15c3-3. If implemented, the minimum haircut floor framework should directly incorporate preexisting regulations such as Rule 15c3-3 and the Federal Reserve's Regulation T into the exemptions from the framework. Specifically, a broker-dealer could not comply with Rule 15c3-3—which requires the broker-dealer to provide a haircut on securities borrowing transactions—and the proposed minimum haircuts on SFTs, which would require the banking organization to receive a haircut.

mortgage-backed securities ("**RMBS**") also would contribute to higher mortgage interest rates. Additionally, the burden on taxpayers could increase if sovereign and PSE borrowing costs increase. The Agencies could mitigate adverse effects by making the following key changes for market risk and CVA risk RWAs under the Proposal.

TBAs and UMBS eligible pools	Clarify that To-Be-Announced ("**TBAs**") and deliverable pools that are Uniform Mortgage-Backed Securities ("**UMBS**")-eligible are treated as the same obligor for both the sensitivities-based method ("**SBM**") and the default risk charge ("**DRC**").
Sovereign exposures	Exempt certain sovereign exposures from credit spread risk ("**CSR**") and DRC charges.
Credit risk weights	Recognize the tax-exempt status of PSEs in the calibration of risk weights under SBM and lower loss-given-default ("**LGD**") under DRC to reflect historical recovery rates
Securitization framework	Improve the calibration of the proposed securitization standardized approach, including through the retention of the existing p-factor calibration and inclusion of a Simple, Transparent and Comparable securitization framework similar to that set out in the Basel final rule, appropriately adjusted for the operation of the U.S. market.
Equity investments in funds	Revise available approaches for equity investments in funds under FRTB-SA so that they are implementable and appropriately aligned with inherent risk.

The Proposal would adversely affect derivative end-users, including commercial end-users, corporate and banking organizations, resulting in negative effects on investors.

Commercial end-users ("**CEUs**") and other derivative end-users would find that the cost for derivatives may increase, or some products become less readily available, which would affect the ability for end-users to hedge their business risks. The Associations are concerned that the combination of increased CVA, market risk and operational risk capital requirements would significantly impair the ability of corporates, insurance companies and pension funds to hedge their business risks. If food producers and airlines, for example, experienced higher costs to hedge their exposures to changes in commodity prices, consumers, in turn, could face higher costs or less access to goods and services. In addition, CEUs and other end-users would have weaker balance sheets and more volatile financial results and would accordingly be less attractive to investors, thereby increasing their cost of capital and borrowing, which could also have downstream effects on consumers and other businesses. To avoid these significant impacts to derivative end users, as well as knock-on consequences to consumers, we recommend the Agencies enhance the risk sensitivity of the capital framework in the Proposal.

Specifically, in the context of CVA:

Client-facing leg of client cleared derivatives	Exempt the client-facing leg of a cleared derivative transactions from CVA capital requirements because these exposures do not pose any CVA risk (i.e., banking organizations do not suffer CVA losses on client-cleared activity).
Distinguishing between regulated and unregulated entities within the financials bucket	Distinguish between regulated (i.e., pension funds, insurance companies, registered investment funds) and unregulated financials to reflect more appropriately the differences in risk profiles.

Appropriate recognition of hedges for exposures	Improve recognition of single name and index hedges under both the basic CVA approach ("**BA-CVA**") and standardized CVA approach ("**SA-CVA**") frameworks.
CVA MPOR	Revise the Margin Period of Risk ("**MPOR**") for CVA purposes to be no greater than 5 business days for derivative transactions subject to regulatory margin requirements in alignment with CVA calculations recognizing the significant improvements in OTC derivatives markets, including the introduction of margin rules for uncleared swaps requiring initial margin and daily variation margin.

In the context of FRTB:

Equity hedge recognition	Enhance the risk sensitivity of equity hedge recognition in DRC for derivatives. Given the inability to use models for calculating DRC, extend the maturity scaling allowed for physical equities to derivatives, as well as "Optional Early Termination" clauses in equity derivative contracts.

In the context of counterparty credit risk:

Investment grade corporates	Revise the risk weight for investment grade corporate counterparties (as defined under the current U.S. capital rules) to 65 percent as opposed to 100 percent irrespective of whether the entity (or its parent) has securities listed on a securities exchange.

Certain aspects of the Proposal would result in excessive volatility or material increases in capital in a manner that is not aligned with the risks and would disincentivize banking organizations from adopting FRTB-IMA.

The significant operational complexities presented by the Proposal would, in many cases, go beyond imposing additional compliance costs. In fact, they would either introduce excessive volatility in capital requirements or further increase capital requirements in a manner that would not be commensurate with applicable risks and would not provide appropriate incentives for banking organizations to implement FRTB-IMA. Therefore, the Agencies should make the following revisions to the Proposal's market risk framework.

PLA test	Convert the profit and loss attribution ("**PLA**") test for modelled desks to an entirely qualitative requirement used for supervisory monitoring as this test would otherwise introduce volatility in capital levels that would disincentivize banking organizations from using FRTB-IMA.
FRTB-SA cap	Cap the total FRTB-IMA capital at FRTB-SA in order to provide appropriate incentives for banking organizations to build FRTB-IMA and to recognize the conservatism of FRTB-SA.

The Agencies should allow for appropriate time to implement these significant changes to the framework.

Additionally, in light of the longer comment process, the fact the Federal Reserve will receive data from its data collection exercise in January 2024 and the operational challenges referenced

above, we recommend that the Agencies revise the proposed July 1, 2025 effective date. In order to provide banking organizations with sufficient time for implementation—and, for those banking organizations applying FRTB-IMA, the models approval process—the effective date should be at least 18 months from finalization of the rule. This approach would provide time for banking organizations to finish model development and accumulate sufficient testing results for internal validations and to satisfy regulatory applications without incurring the penalty of the PLA add-on (if implemented in the final rule).

In this regard, the Associations appreciate public statements recognizing the need for improvements to the trading and capital markets aspects of the Proposal, including with respect to introducing a phase-in with respect to capital requirements for non-modellable risk factors ("**NMRF**") and the PLA test framework. However, as described in this letter, in light of the extent of the changes needed, a phase-in period or similar construct would not be sufficient to resolve the issues presented by the Proposal.

* * *

Conclusion

The Associations appreciate the opportunity to submit our comments on the Proposal. We are strongly committed to maintaining the safety and efficiency of U.S. financial markets and hope the Agencies implement our recommendations, which reflect the extensive knowledge and experience of market professionals within the Associations and our members. Our recommendations are designed to make the U.S. capital framework more risk sensitive to avoid the potential adverse consequences of the Proposal on financial markets, consumers, end-users and the economy more generally. Please contact Lisa Galletta at lgalletta@isda.org or (917) 624-3411 and Guowei Zhang at gzhang@sifma.org or (202) 962-7340 if you wish to discuss the points raised in this letter further.

Very truly yours,

Scott O'Malia
Chief Executive Officer
International Swaps and Derivatives Association, Inc.

Kenneth E. Bentsen, Jr.
CEO and President
Securities Industry and Financial Markets Association

About the Associations

Since 1985, ISDA has worked to make the global derivatives markets safer and more efficient. Today, ISDA has over 1,000 member institutions from 77 countries. These members comprise a broad range of derivatives market participants, including corporations, investment managers, government and supranational entities, insurance companies, energy and commodities firms, and international and regional banks. In addition to market participants, members also include key components of the derivatives market infrastructure, such as exchanges, intermediaries, clearing houses and repositories, as well as law firms, accounting firms and other service providers. Information about ISDA and its activities is available on ISDA's website: www.isda.org.

SIFMA is the leading trade association for broker-dealers, investment banks and asset managers operating in the U.S. and global capital markets. On behalf of our industry's nearly 1 million employees, we advocate for legislation, regulation and business policy, affecting retail and institutional investors, equity and fixed income markets and related products and services. We serve as an industry coordinating body to promote fair and orderly markets, informed regulatory compliance, and efficient market operations and resiliency. We also provide a forum for industry policy and professional development. SIFMA, with offices in New York and Washington, D.C., is the U.S. regional member of the Global Financial Markets Association ("**GFMA**").

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Impact of Quantified FRTB-SA Mitigation Items: 23
A. The proposed revisions to the capital treatment of term repo-style transactions would overstate market risk capital requirements for these transactions through duplicative requirements. 24
B. The proposed treatment of sovereign exposures, MDB exposures and supranational exposures under SBM and DRC requires significant revision. 29
1. Certain sovereign exposures, MDB exposures and supranational exposures should receive a 0 percent risk weight under SBM for CSR. 29
2. Local currency denominated sovereign debt positions should not be subject to CSR SBM capital. 30
3. The proposed treatment of non-U.S. sovereign positions and certain supranational entities under the DRC should be revised to align conceptually with ERBA credit risk requirements. 31
C. UMBS-eligible securities and deliverable pools in the TBA market should be considered one "issuer." 32
D. Aspects of SBM should be revised to enhance the recognition of diversification and align with risk management practices. 33
E. The proposed treatment of equity investments in investment funds under the FRTB-SA would significantly overstate capital requirements. 34
1. The proposed capitalization approaches for equity investments in funds under the SBM framework in FRTB-SA would not be implementable or would be extremely punitive, resulting in capital requirements disproportionate to the inherent risk of the fund positions. 34
2. The mandate-based approach for capitalization of equity investments in funds under the default risk charge is risk insensitive and would raise significant operational burdens. 36
F. The proposed decomposition treatment of CTPs under the DRC should be clarified and certain provisions revised to increase risk sensitivity and more accurately reflect the economics of hedging activities. 37
G. The risk weight for investment grade covered bonds should be reduced from 2.5 percent to 1.5 percent. 38
H. The proposed scope of application for the residual risk add-on is too broad and not commensurate with risk. 39

1. The exotic residual risk add-on should not apply if an exposure is captured by either SBM or DRC, or if pricing of an instrument referencing an exotic exposure is not materially dependent on the exotic exposure. 39

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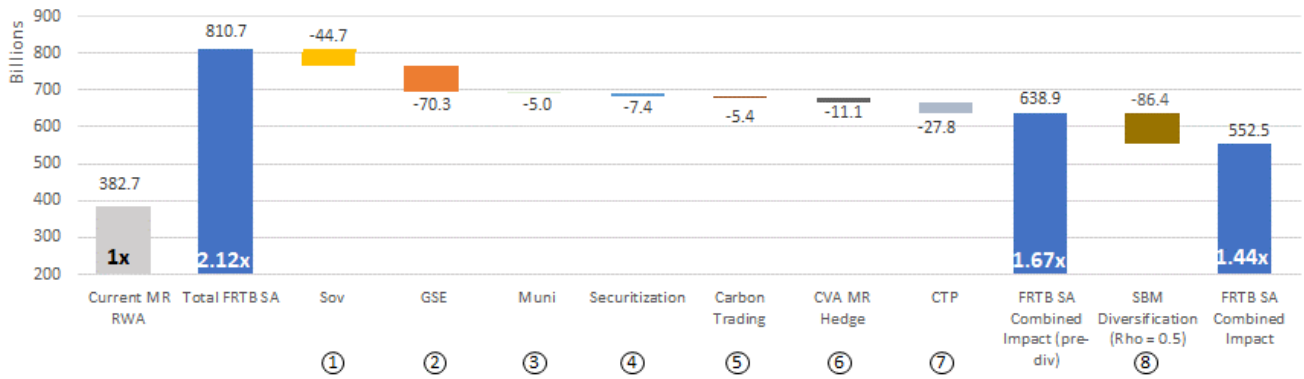
THE ASSOCIATIONS' RECOMMENDATIONS REGARDING THE PROPOSAL

I Market Risk: FRTB-SA

Industry QIS Results

Based on the QIS results, the total market RWAs under FRTB-SA would be 2.12[36] times the current market risk RWA. If the Agencies were to implement the mitigation items listed below, the combined impact would reduce market RWAs under FRTB-SA to 1.44[37] times the current market risk RWA.

Figure 1: QIS FRTB SA RWA Impact



Impact of Quantified FRTB-SA Mitigation Items:

1. **Sovereigns**: Excluding specific sovereign exposures, MDBs and supranationals from SBM and DRC would lead to a $44.7 billion[38] (of which $35.6 billion[39] is EM Sovereigns) RWA reduction, primarily driven by the exclusion of certain local currency sovereigns in DRC.
2. **GSEs**: Clarifying UMBS-eligible and ineligible pools as exposures to the same obligor would result in FRTB-SA RWA that is $70.3 billion[40] lower.
3. **Municipal bonds**: Considering the tax-exempt status of municipal bonds and reducing the risk weights and LGD rates in both SBM and DRC would lead to $5.0 billion[41] RWA reduction.
4. **Securitization**: Reverting the "p" factor to 0.5 would result in a $7.4 billion[42] RWA reduction.

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36 See Appendix 8 – Quantitative Impact Study Results, Index TB_13.

37 See Appendix 8 – Quantitative Impact Study Results, Index TB_14.

38 See Appendix 8 – Quantitative Impact Study Results, Index TB_15.

39 See Appendix 8 – Quantitative Impact Study Results, Index TB_15a.

40 See Appendix 8 – Quantitative Impact Study Results, Index TB_16.

41 See Appendix 8 – Quantitative Impact Study Results, Index TB_17.

42 See Appendix 8 – Quantitative Impact Study Results, Index TB_18.

5. **Carbon trading**: Reducing the risk weight to 40 percent would result in a $5.4 billion[43] RWA reduction.
6. **Ineligible CVA hedges in market risk**: Not including ineligible CVA hedges in market risk capital requirements would decrease RWA by $11.1 billion.[44]
7. **CTP decomposition**: Allowing CTP decomposition in DRC, using non-securitization risk weights, non-zero recovery and non-securitization bucketing would result in $27.8 billion[45] RWA reduction.
8. **FRTB-SA diversification**: Introducing an inter risk-class correlation parameter of 0.5 would result in a 14 percent[46] reduction in FRTB-SA, corresponding to $86.4 billion[47] RWA reduction in total FRTB RWA assuming FRTB-SA is applied for all desks.

Although the Associations were not able to quantify fully all effects of our recommended changes to the Proposal, further revisions are needed more broadly as outlined in this letter to avoid negative implications for the U.S. capital markets and resulting effects on CEUs, other businesses and consumers.

A. The proposed revisions to the capital treatment of term repo-style transactions would overstate market risk capital requirements for these transactions through duplicative requirements.

The Proposal would continue to permit a banking organization to elect to include a term repo-style transaction within its market risk capital requirements if the term repo-style transaction meets specified criteria.[48] The Associations support retaining the election to include term repo-style transactions in market risk capital requirements but have serious concerns regarding the proposed revisions to the treatment of term repo-style transactions in the market risk framework. In particular, the proposed requirement to include the market risk and default risk of the security collateral leg in market risk would be a fundamental departure from the current scope of covered positions and would create a material disconnect between capital requirements and the underlying economic risk profile of these transactions. The Proposal would make this election practically unworkable,[49] such that banking organizations may decide not to include term repo-style transactions in market risk. In that circumstance, the banking organization would not be able to recognize the risk mitigation effects of non-investment grade collateral in counterparty

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43 See Appendix 8 – Quantitative Impact Study Results, Index TB_19.

44 See Appendix 8 – Quantitative Impact Study Results, Index TB_20.

45 See Appendix 8 – Quantitative Impact Study Results, Index TB_21.

46 See Appendix 8 – Quantitative Impact Study Results, Index TB_22.

47 See Appendix 8 – Quantitative Impact Study Results, Index TB_23.

48 § _.205(g).

49 The QIS data suggest that the default risk charge of term repo-style transactions alone—without considering the SBM component—would constitute almost 40 percent (i.e., 37.7 percent) of the total SFT CCR ERBA RWA and, relative to mitigated ERBA, almost 100 percent (i.e., 93.9 percent) of total SFT CCR ERBA RWA (See Appendix 8 – Quantitative Impact Study Results, Index TB_24a and TB_24b). The benefit arising from reflecting non-financial collateral in the exposure calculation is expected to be lower than that estimated increase in RWAs.

credit risk, which would reduce the risk sensitivity of the SFT counterparty credit risk framework.

Under the proposed approach, a banking organization would be required to capture the risk factor sensitivities associated with the funding risk of the term repo-style transaction (i.e., interest rate risk in respect of the cash leg of the term repo and a credit spread component based on the counterparty and the underlying collateral), which is consistent with current practice. A banking organization also would be required to capture the risk factor sensitivities of the security leg of the term repo-style transaction, including CSR, equity risk, commodity risk and foreign exchange risk, depending on the particular instruments underlying the term repo-style transaction. Separately, a banking organization would be required to calculate a DRC charge using the collateral haircut approach.

The market risk applicable to term repo-style transactions is solely based on the risk of fluctuations in the repo funding rate. Changes in the repo funding curve may reflect changes in general interest rates or also idiosyncratic factors related to the supply and demand consideration of the type of collateral. That is what banking organizations currently reflect in market risk calculations. The banking organization does not face market price risk or issuer default risk on the security collateral of the repo-style transaction. The banking organization faces only contingent risk (i.e., risk contingent upon the default of the counterparty) that is not included in market risk and is instead reflected in the supervisory haircuts applicable in the collateral haircut approach under the counterparty credit risk RWA charge.

In addition to aligning with economic risk, the current approach is also consistent with the accounting treatment. Specifically, in a vanilla reverse repo-style transaction in which the banking organization buys the security, subject to resale at a later time, the security is not recognized on the balance sheet of the banking organization acting as the cash lender as the banking organization has no economic interest in the security. Instead, a reverse-repo asset due from the counterparty is recognized on the banking organization's balance sheet. Equally, when the banking organization owns a security and enters into a vanilla repo-style transaction in which the banking organization sells the security subject to repurchase at a later time, the security is not derecognized from the balance sheet of the banking organization acting as the cash borrower. Instead, the banking organization recognizes on its balance sheet a repo liability due to the counterparty.

As long as the counterparty performs, the banking organization is not exposed to changes in the collateral value. If the collateral were to lose value, the counterparty would have to post margin to the banking organization in order that the agreed upon level of collateralization remains the same. If the counterparty were to default, the banking organization would be exposed to collateral price changes because the banking organization would take possession of the collateral to close out its position on a net basis. The risk that the collateral value would decline during the close-out period is captured through the collateral haircut approach and specifically through the supervisory haircuts, as part of the counterparty credit risk calculation.

Table 3 below summarizes the impact. Under this fact pattern, Bank A lends $9.8 million in cash to Bank B and receives $10 million in 10-year government bond as collateral. Bank A does not recognize the collateral on its balance sheet. During the term of the transaction, the bond

price decreases by 10 points, resulting in Bank A collecting $1 million in margin from Bank B. Accordingly, at maturity, Bank A returns the 10-year government bonds (now worth $9 million) to Bank B in exchange for $8.8 million in cash.

Table 3: Term Repo-Style Transaction Impact to Bank A

Bank A	Reverse Repo	Bond Collateral
Balance Sheet	Asset	N/A – not recognized
P&L	0 (no change in the repo curve)	N/A – No exposure/P&L
Recommended FRTB RWA	$0.2MM	N/A – No exposure
FRTB RWA per Proposal	$0.2MM	$16.2MM
Bank A	**Reverse Repo**	**Bond Collateral**
Balance Sheet	Asset	N/A – not recognized
P&L	0 (no change in the repo curve)	N/A – No exposure/P&L
Recommended FRTB RWA	$0.2MM	N/A – No exposure
FRTB RWA per Proposal	$0.2MM	$16.2MM

As the table demonstrates, under the Proposal, market risk capital requirements ($16.2 million) for a reverse repo-style transaction would not reflect the underlying risk because the Proposal would include the security in the market risk calculation when there is no corresponding income statement or balance sheet impact.

When the banking organization buys a bond and then enters into a repo-style transaction to finance the bond, the requirement to include the posted collateral leg in the market risk calculation would vastly understate capital requirements as Table 4 below shows when the transaction described above is viewed from the perspective of Bank B. Bank B recognizes a repo liability on its balance sheet and the 10-year government bond position remains on Bank B's balance sheet, such that Bank B incurs a $1 million loss on the 10-year government bond position notwithstanding that Bank B lent the bond to Bank A.

Table 4: Term Repo-Style Transaction Impact to Bank B

Bank B	Repo	Bond Position
Balance Sheet	Liability	Asset
P&L	0 (no change in the repo curve)	-$1MM
Recommended FRTB RWA	$0.4MM	$16.6MM
FRTB RWA per Proposal	$0.4MM	$1MM

The banking organization would retain the risk of the purchased bond on its balance sheet. In other words, any reduction in the value of the bond (in this case -$1 million) would flow through the banking organization's income statement. The Proposal would require banking organizations to include the posted bond as part of the repo-style transaction as a short position and as such it would net with the long position the banking organization has on its balance sheet. Accordingly, the Proposal would understate the market risk arising from the outright long position in the security ($16.6 million as recommended by the Associations in comparison to $1 million under the Proposal).

These examples demonstrate that the Proposal's requirement to include the security leg of a repo-style transaction or reverse repo-style transaction in market risk results in significant overstatements or understatements of market risk exposures. Therefore, only the risk to the funding curve for repo-style transactions should be included in the market risk consistent with current practice.

The Associations recognize that the net requirement described above may be driven by a concern that the 30 percent supervisory market price volatility haircut applicable under the collateral haircut approach to non-financial collateral may be insufficient. However, the treatment and associated calibration of recognizing non-investment grade collateral of term repo-style transactions through a 30 percent supervisory market price volatility haircut is in fact conservative.

The Associations analyzed the changes in fair value of non-investment grade corporate and sovereign collateral. Table 5 below shows the largest change in fair values since at least 2011:[50]

[50] In both cases, the industry used fair value yield curves to calculate changes in the fair value of hypothetical semiannually paying par bonds over an overlapping 10 day holding period. The time-series tickers used in connection with this analysis is provided in Appendix 7.

Table 5: Changes in Fair Value of Non-IG Corporate and Sovereign Collateral

Tenor / Type	Corporate (Average of B/BB)[51]	Sovereign (Average of Turkey, Brazil, and South Africa)[52]
3Y	-10%	-6%
5Y	-14%	-10%
10Y	-18%	-16%

The sovereigns referenced in this analysis represent some of the largest non-investment grade issuers. The largest changes in fair values over the most common maturities are all well within the 25 percent and 30 percent haircuts under the current U.S. standardized approach and ERBA, respectively.

Additionally, the most common types of non-financial collateral for term repo-style transactions are debt instruments that are not investment grade. Evidence suggests that the supervisory haircut of 30 percent over a 10-business day period for these instruments also is conservative. As an illustration, the Associations reviewed the performance of the S&P High Yield Corporate Bond index since 2008. Over this 15-year period, there are two periods during which the index experienced significant short-term declines due to credit risk-related flight to quality:

- The market turmoil at the beginning of COVID-19 in March 2020; and
- The market crisis following the bankruptcy of Lehman Brothers and financial difficulties faced by AIG in September/October 2008;

As demonstrated in Table 6 and Figure 2 below, over these two periods, the worst 10-business day-return never exceeded the supervisory haircut of 30 percent:

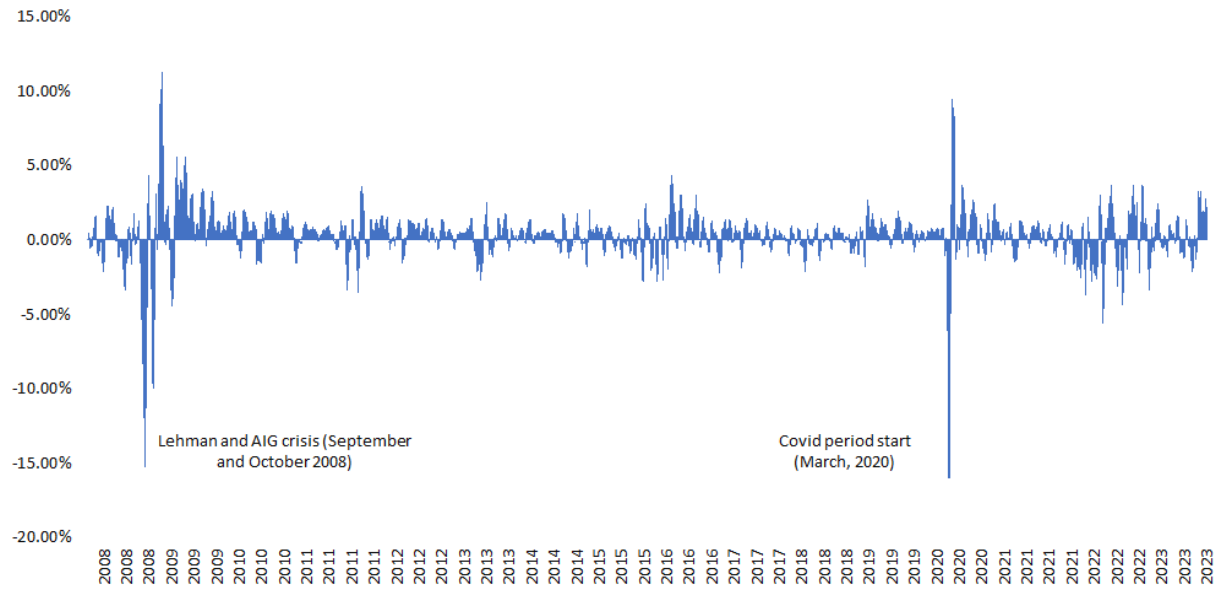
Table 6: Worst 10-Day Returns (COVID and Lehman Stress Periods)

Crisis Periods	Worst 10-Day Returns over the Period
COVID-19 Period (March 2020)	-16.01%
Lehman/AIG Crisis (Sep/Oct 2008)	-15.26%

[51] Data since June 2009.

[52] Data since April 2011.

Figure 2: S&P High Yield Corporate Bond Index Returns



Although the 30 percent supervisory haircut is conservative based on the analysis above, to the extent the Agencies find it necessary, the Agencies should separately assess whether the 30 percent supervisory haircut is sufficient based on an appropriate data collection exercise to ascertain (i) the non-investment grade collateral most commonly used in the SFT market and (ii) the market price volatility of these securities.

B. The proposed treatment of sovereign exposures, MDB exposures and supranational exposures under SBM and DRC requires significant revision.

1. Certain sovereign exposures, MDB exposures and supranational exposures should receive a 0 percent risk weight under SBM for CSR.

The Proposal would reaffirm the current capital treatment for exposures to sovereigns, MDBs and supranationals for purposes of credit risk capital requirements by specifying a 0 percent risk weight for exposures to certain supranational and MDB exposures and certain sovereign exposures. However, for market risk capital purposes, the Proposal would depart from current market risk capital treatment and subject these exposures to a nonzero risk weight for CSR with respect to the proposed sensitivities-based method ("**SBM**").[53] The Proposal also does not specifically address supranational exposures under SBM. Based on the QIS, the marginal impact

[53] Table 3 to § _.209.

to SBM of excluding sovereign exposures, supranational exposures and MDB exposures receiving a 0 percent risk weight is a reduction of 3 percent.[54]

The Proposal would introduce inconsistent treatment with respect to the capital requirements for market risk and credit risk and, by increasing market risk capital requirements, could have adverse effects on the liquidity and functioning of markets for sovereign, supranational and MDB exposures.

It is important to maintain consistency between credit risk and market risk capital requirements. Consistency with the credit risk framework would also align with how these positions are traded and risk managed. In general, banking organizations do not consider these positions to have a "credit spread" component but instead to be subject only to interest rate risk. Accordingly, all exposures that currently receive a 0 percent risk weight under the proposed new standardized approach for credit risk under Subpart E (in particular, under Sections 111(a)(1), 111(a)(2), 111(a)(5) and 111(b) of the Proposal) or under Subpart D of the current U.S. capital rules (in particular, under Sections 32(a)(1), 32(a)(2), 32(a)(5) and 32(b) of the current U.S. capital rules) should not be subject to CSR capital requirements. This would include exposures to Organization for Economic Cooperation and Development ("**OECD**") sovereigns with no Country Risk Classification ("**CRC**") or a CRC between 0-1.

For pricing and risk management purposes, these positions typically are not considered "credit risky" and, therefore, a banking organization would not have a model for them. Accordingly, a banking organization should not be required to model and generate credit risk sensitivities only for purposes of market risk capital requirements. It would also result in additional operational challenges and complexities.

2. Local currency denominated sovereign debt positions should not be subject to CSR SBM capital.

A banking organization would generally not consider sovereign exposures denominated in a local currency as "credit risky," and that is reflected in the banking organization's pricing and risk management models, which consider currency devaluation as the material risk for these exposures. Accordingly, these exposures should not be subject to CSR SBM capital requirements and a banking organization should not be required to generate the CSR sensitivities solely for purposes of market risk capital calculations. In fact, requiring banking organizations to generate these sensitivities would further add to the operational challenges and complexities of implementing the Proposal.

[54] This 3 percent reduction includes the effects of excluding local currency denominated sovereign debt positions from credit spread risk SBM capital, which is discussed in Section I.B.2. See Appendix 8 – Quantitative Impact Study Results, Index TB_25.

3. The proposed treatment of non-U.S. sovereign positions and certain supranational entities under the DRC should be revised to align conceptually with ERBA credit risk requirements.

Under the Proposal, non-U.S. sovereign positions would receive a nonzero risk weight under the DRC.[55] This proposed approach would result in a significant increase in capital requirements for market-making activities and could have negative effects on the liquidity of sovereign debt markets and related markets. Based on the QIS: (1) the marginal impact to non-securitization DRC of excluding emerging markets sovereigns receiving a 0 percent risk weight would be a reduction of 24[56] percent, and (2) the marginal impact to non-securitization DRC of excluding sovereigns other than U.S. government securities and supranational entities would be a reduction of 3[57] percent to total DRC.

To avoid these adverse consequences, the Agencies should make three changes to the Proposal.

First, exposures that would receive a 0 percent risk weight under the proposed ERBA credit risk framework should not be subject to DRC requirements. Under the ERBA credit risk framework, exposures to a sovereign that is an OECD member with no CRC or a sovereign that has a CRC between 0-1 would be subject to a 0 percent risk weight.[58] In addition, a banking organization would assign a 0 percent risk weight to exposures to the following supranational entities: the Bank for International Settlements, the European Central Bank, the European Commission, the International Monetary Fund, the European Stability Mechanism, the European Financial Stability Facility.[59] It would be inconsistent for a banking organization to be permitted to apply a 0 percent risk weight to these exposures under the credit risk framework in ERBA but nonetheless assign a nonzero risk weight for purposes of the DRC.

Second, consistent with the proposed ERBA credit risk framework (§ _.111(a)(3)), non-U.S. sovereign exposures denominated in a local currency that are effectively offset by an equivalent amount of local currency liabilities should be subject to a lower risk weight than the applicable risk weight for DRC. Although this provision was carried over from the current U.S. capital rules to the proposed ERBA credit risk rules, it was not carried over to DRC, which would be inconsistent with the banking book treatment. When a banking organization has local currency liabilities that effectively offset the sovereign exposures denominated in the local currency, any losses the banking organization incurs on the sovereign exposure as a result of devaluations of the local currency would be offset by the devaluation of the banking organization's corresponding local liabilities.

Third, with respect to non-U.S. sovereign exposures denominated in a local currency for which the banking organization does not have an equivalent amount of local currency liabilities to offset its local sovereign exposures, the banking organization should be permitted to assign a

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55 § _.210(b)(3)(i)(A).

56 See Appendix 8 – Quantitative Impact Study Results, Index TB_26.

57 See Appendix 8 – Quantitative Impact Study Results, Index TB_27.

58 § _.111(a)(2).

59 § _.111(b).

default risk weight for the non-U.S. sovereign position based on an evaluation of the credit quality of the non-U.S. sovereign with respect to exposures in the local currency. In certain circumstances, a banking organization may assign a non-U.S. sovereign exposure denominated in a local currency to a higher (or lower) credit quality category than an exposure denominated in a non-local currency (e.g., U.S. dollars). This approach would be more risk sensitive and aligned with the underlying economics of these non-U.S. sovereign exposures. This also would be consistent with the Federal Reserve's approach in its supervisory stress testing framework, which generally differentiates sovereign bonds issued in the same currency as the sovereign's base currency from sovereign bonds issued in a currency different from the sovereign's base currency.[60]

C. UMBS-eligible securities and deliverable pools in the TBA market should be considered one "issuer."

The preamble to the Proposal provides that, with respect to securities in the to-be-announced ("**TBA**") market, "Freddie Mac and Fannie Mae securities are not interchangeable and would be treated as separate names under the proposal."[61] The preamble to the Proposal notes that "[a]s part of the single security initiative, UMBS allows for either Fannie Mae or Freddie Mac to deliver, thus creating the basis risk between the GSEs for such securities."[62]

The Associations seek clarification that TBAs and deliverable pools that are eligible as Uniform Mortgage-Backed Securities ("**UMBS**") would be treated as the same obligor under SBM and DRC.

TBAs and deliverable pools are interchangeable exposures and each of TBAs and pools are, therefore, generally used by market participants to hedge positions in one another. The treatment recommended above would be consistent with the treatment of mortgage pools that are UMBS-eligible and TBAs under the proposed DRC framework. In that context, as reflected in the preamble to the Proposal, "[a]s the single security initiative led by Fannie Mae and Freddie Mac has homogenized the mortgage pool and security characteristics for Uniform Mortgage-Backed Securities (UMBS), the proposal would allow the banking organization to fully offset Uniform Mortgage Backed Securities that are issued by two different obligors."[63]

If this recommendation is not implemented, GSE exposures involving UMBS and deliverable pools would be subject to higher capital requirements that do not reflect the underlying risks of these transactions, which would likely have adverse effects on the depth and liquidity of the RMBS markets and could also affect the costs of home ownership through higher costs for mortgage credit. The Proposal also would undermine the implementation of the UMBS market that was intended to increase liquidity by creating a combined market for Fannie Mae and Freddie Mac securities. If the above recommendation is not implemented, then, based on the

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60 Federal Reserve, Instructions for the Capital Assessments and Stress Testing information collection (Reporting Form FR Y-14Q), p. 100 (modified June 30, 2023).

61 88 Fed. Reg. at 64,123, fn. 355.

62 88 Fed. Reg. at 64,123, fn. 355.

63 88 Fed. Reg. at 64,125.

QIS, FRTB-SA capital for GSE exposures would increase by 98[64] percent in comparison to FRTB-SA capital if the Associations' recommendation to treat TBAs and UMBS-eligible deliverable pools as the same obligor is not implemented.

D. Aspects of SBM should be revised to enhance the recognition of diversification and align with risk management practices.

In general, SBM would enhance the market risk capital framework by introducing a standardized approach to market risk in the U.S. bank capital framework that is a credible alternative to an internal models approach. However, some aspects of the SBM should be improved to enhance the recognition of diversification and align market risk capital requirements with common risk management practices and underlying economic exposures.

At a high level, SBM does not recognize the benefits of diversification between asset classes. This assumption is not sufficiently risk sensitive or empirically grounded.

Accordingly, the Associations recommend that a correlation parameter across risk classes be introduced within SBM, in accordance with the following formula:

$$capital\ requirement = \sqrt{\sum_b SBM_b^2 \ + \sum_b \sum_{c \neq b} \rho_{bc} SBM_b SBM_c} + DRC + RRAO$$

Under this formulation, SBM_b would represent the risk class-level capital requirement for each of the seven risk classes under SBM; ρ_{bc} would represent a new inter-asset class correlation parameter or parameter set. The Association recommend a value of 0.5 for this new correlation parameter, which would result in a 10.7[65] percent reduction in overall FRTB-SA capital requirements based on the QIS.

As a point of comparison, using quarterly data publicly reported by the eight U.S. GSIBs in Pillar III disclosures between Q1 2020 through Q1 2023, applying a correlation parameter of 0.5 across VaR for each asset class (e.g., interest rate, foreign exchange, equities, credit and commodities) would have resulted in an aggregate VaR number that would have been 45 percent higher on average than the fully diversified VaR that banking organizations actually used for purposes of current U.S. market risk RWA calculations. Notably, even during the COVID-19 stress periods in Q1 and Q2 2020, a 0.5 correlation parameter would have resulted in approximately 30 percent higher total VaR than banking organizations realized. Consequently, the recommended 0.5 correlation parameter would be conservative with respect to the actual realized correlations across different asset classes.

In addition, there should be a capital offset for long gamma positions, which banking organizations often use to hedge delta risks. This point could be addressed through modifying the formula for curvature risk.

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64 See Appendix 8 – Quantitative Impact Study Results, Index TB_28.

65 See Appendix 8 – Quantitative Impact Study Results, Index TB_29.

E. The proposed treatment of equity investments in investment funds under the FRTB-SA would significantly overstate capital requirements.

Under the Proposal, for purposes of FRTB-SA, a banking organization generally would be required to apply a look-through approach for its equity positions in an investment fund that are market risk covered positions. The banking organization would treat the underlying positions of the investment fund as if the positions were held directly by the banking organization, subject to specified exceptions for listed and well-diversified positions held by the investment fund or an investment fund that closely tracks an index benchmark.[66] With respect to equity positions in an investment fund for which the banking organization is not able to use the look-through approach, the banking organization would calculate market risk capital requirements using (i) the tracked index method, (ii) the hypothetical portfolio approach or (iii) the fallback method.

1. The proposed capitalization approaches for equity investments in funds under the SBM framework in FRTB-SA would not be implementable or would be extremely punitive, resulting in capital requirements disproportionate to the inherent risk of the fund positions.

The Associations are concerned that the capital treatment of funds remains problematic and uneconomic under the FRTB framework. Although the proposed FRTB-IMA framework contains some improvements, most of the approaches in the FRTB-SA rules would not be implementable and, instead, banking organizations would be forced to apply the "fallback method" for investment funds in § _.205(e)(3)(iii) for a majority of the fund population. This "fall back method" would be too conservative and insufficiently risk sensitive with respect to the inherent risks of the fund positions.

In order to apply the look-through approach under FRTB-SA, a banking organization would be required to generate all applicable sensitivities and stress scenarios using the appropriate front office valuation models. This is more stringent than the look-through approach for purposes of banking book capital requirements, for which the look-through approach is based on the exposure amount and risk weight for the underlying fund positions. A banking organization may not be able to calculate the sensitivities and stress scenarios for some underlying positions of an investment fund required for the look-through approach under FRTB-SA for a variety of reasons, including when the investment fund holds positions in other investment funds or when the banking organization does not model an underlying position in which the fund invests.

The FRTB-SA capitalization rules must be appropriate for funds as the standardized approach would be required to be applied for all desks irrespective of a banking organization's selection of FRTB-IMA. Moreover, it may also not be possible for a banking organization to apply for FRTB-IMA for all desks holding funds (e.g., due to poor model performance or lack of infrastructure). Accordingly, FRTB-SA must provide a credible fallback mechanism. Because FRTB-SA capital serves as a cap in the global portfolio capital formula, it needs to be appropriately calibrated to serve this purpose.

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[66] § _.205(e)(1)-(2).

Accordingly, the Associations propose the following enhancements to the FRTB-SA framework. These proposals are not mutually exclusive because not all funds would be eligible under a particular approach.

- Index bucket method: We note that the standard initial margin model ("**SIMM**") methodology already incorporates the use of index buckets for funds into its standardized calculations. This treatment should be extended to the FRTB-SA capitalization of funds, without any requirement to look-through the fund. The selection of the appropriate index bucket could be based on a fund's prospectus or mandate. For example, if a mutual fund's prospectus provides that it will primarily invest in U.S. large-cap equity securities, then a position in that mutual fund should be capitalized by assigning the mutual fund to Equity bucket 12 "Equity indices that are both large market cap and liquid market economy," with diversification allowed with other exposures.

- Tracked index method: We note that the requirement in the Proposal to determine that a fund "closely tracks an index benchmark" is not further specified in the proposal and we support such flexibility when applied consistently. In that regard, for a fund whose mandate or prospectus require that it track an index and which publishes its tracking performance quarterly, a banking organization should be permitted to use the tracked index method without further justification or assessment. For other funds, a banking organization should document its approach to assessing how the fund tracks an index in its policies and procedures. This would document the criteria for assessment, including references to the fund's prospectus, the use of metrics such as tracking error or tracking distance, and any other criteria, for example, to deal with temporary market dislocations. A banking organization should also be permitted to use the information provided by the fund itself or a third party for application of the "tracked index method," in which case, the fund or third party would specify the criteria to determine if a fund "closely tracks an index benchmark" in its own documentation.

- Hypothetical portfolio approach: The proposed hypothetical portfolio approach is too conservative because a banking organization would be required to calculate market risk capital requirements for the decomposed positions in the hypothetical portfolio on a stand-alone basis separate from its other market risk covered positions. This approach would not appropriately recognize the risk-mitigating effects of hedging and diversification and would not be sufficiently risk sensitive. It would also contrast with the proposed hypothetical portfolio approach under FRTB-IMA, which would permit a banking organization to recognize diversification and aggregation benefits with other exposures. There is no principled reason for this punitive treatment of funds under FRTB-SA compared to FRTB-IMA, particularly in light of the conservative treatment of shocks and correlations applicable under FRTB-SA as compared to FRTB-IMA. Also, a banking organization should be allowed to use representative benchmarking positions to build the hypothetical portfolio, for example, based on the information in the prospectus of the fund.

- Effective risk weight method: A banking organization should be allowed to calculate an effective risk weight, or to use an effective risk weight calculated by a third party, for capitalization of a fund under FRTB-SA SBM. This approach is similar to the external party approach proposed in the UK FRTB draft rules. Under this approach, the fund's exposure should be capitalized within one or more appropriate buckets without the requirement to look-through the fund, and with diversification allowed with other exposures.

- Alternative capitalization approach: Similar to the FRTB-IMA proposed rules that would permit a banking organization to apply an alternative approach with prior supervisory approval, the final rule should include a provision for applying an alternative methodology under FRTB-SA.

2. The mandate-based approach for capitalization of equity investments in funds under the default risk charge is risk insensitive and would raise significant operational burdens.

Under the Proposal, for DRC capitalization a banking organization would be required to "look through" the fund. However, this approach may not be implementable for a majority of the fund population as the banking organization would not book or model each of the underlying instruments of a fund. Alternatively, the Proposal provides that where a banking organization has applied the "fall back method" under the FRTB-SA SBM rules, then for the DRC the banking organization would be required to review the mandate for each fund to (i) apply the worst risk weight by assuming the fund invests to the maximum extent in exposures with the highest risk weights and (ii) determine whether the risk weight applied to the fund is prudent or if the residual risk add-on must apply.

This approach is overly conservative and insufficiently risk sensitive with respect to the inherent risks of the fund positions. In addition, this approach raises significant operational burdens and may not be practically implementable in all cases. Accordingly, there is no alternative risk sensitive or implementable approach available for default risk charge capitalization of funds.

The Associations recommend that a banking organization be permitted to capitalize the fund position as a single name exposure with, for example, the sub-speculative risk weight within the appropriate default risk sector (non-U.S. sovereign positions, PSE and GSE debt position or Corporate positions), and to recognize diversification of the fund's exposure with respect to other default exposures. Further, a banking organization should be permitted to calculate an effective risk weight (e.g., based on the hypothetical portfolio approach), or to use an effective risk weight calculated by a third party, in order to capitalize the fund in the appropriate default risk sector, without the requirement to look-through the fund and with diversification with other default exposures permitted.

F. The proposed decomposition treatment of CTPs under the DRC should be clarified and certain provisions revised to increase risk sensitivity and more accurately reflect the economics of hedging activities.

Although the Associations appreciate that the Proposal would permit the decomposition of multi-underlying instruments under the SBM, there remains a lack of clarity regarding the implementation of decomposition under DRC. Decomposition of multi-underlying instruments under the DRC is equally crucial, as the QIS data shows. In particular, if decomposition is not permitted, capital requirements for CTPs would increase by 195[67] percent over current U.S. capital requirements, driven largely by DRC. If decomposition is permitted and non-securitization risk weights are applied to the decomposed single name net default exposures, capital requirements for CTPs would be lower, though the Proposal would still result in a 33[68] percent increase over current U.S. capital requirements.

The Associations seek confirmation regarding the application of CTP decomposition. Section 210(d)(2)(iii) would permit a banking organization to net the decomposed gross default exposures. In this context, the preamble to the Proposal provides:

> decomposition into single-name equivalent exposures account for the effect of marginal defaults of the single names in the tranched correlation trading position, where in particular the sum of the decomposed single name amounts would be required to be consistent with the undecomposed value of the tranched correlation trading position.[69]

The Associations interpret the requirement to calculate decomposed single name gross default exposure to relate to "marginal" default exposures, i.e., the difference between the value of the instrument and the value of the instrument assuming that the single name defaults. In this context, the sum of the decomposed single name amounts for tranches would not equal the gross default exposure of the tranche. Therefore, there is uncertainty regarding the meaning of the preamble language quoted above. The Associations assume that a banking organization would not be required to adjust further the marginal default exposures as defined above. Accordingly, the Associations recommend not including in the preamble to, or rules text of, a final rule that "the sum of the decomposed single name amounts would be required to be consistent with the undecomposed value of the tranched correlation trading position."

Furthermore, the Associations seek confirmation that a banking organization may apply the non-securitization risk weights in Table 1 to § _.210 to the decomposed single name net default exposures as calculated under § _.210(d)(2)(iii), which is assumed in the 33 percent figure cited above. This treatment would be appropriate because the decomposed single name net default exposure has no association with a particular tranched or untranched index. Consistent with this approach, a banking organization should use the same buckets for decomposed single name net default exposures calculated under § _.210(d)(iii) as those applicable to non-securitization

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67 See Appendix 8 – Quantitative Impact Study Results, Index TB_30.

68 See Appendix 8 – Quantitative Impact Study Results, Index TB_31.

69 88 Fed. Reg. at 64,127.

exposures under § _.210(b)(3)(i), not the index buckets in § _.210(d)(3)(i) given that the index is not relevant for the decomposed exposures.

In addition, § _.210(d)(2)(iii) would permit netting of decomposed single name exposures "when the long and short gross default exposures are otherwise equivalent except for a residual component." The "except for residual component" language should not impose a restriction regarding when a banking organization may net a long and a short decomposed net default exposure with respect to the same obligor. Instead, any remaining decomposed net default exposure would be subject to capital requirements as outlined above.

Additionally, the following further changes to the rules text would enhance the risk sensitivity of the DRC calculation.

- ***First***, under § _.210(b)(1)(iv), a banking organization would assign zero recovery when calculating the decomposed gross default exposure of multi-underlying instruments. This treatment would be inconsistent with single-underlying instruments and would lead to incorrect net default exposure calculations given the different LGD assumptions for exposures that, in reality, would be subject to the same LGD in the event of default of a single name obligor. Therefore, the Associations recommend that a banking organization use the LGD assumptions defined in § _.210(b)(1)(v) in calculating net default exposure of multi-underlying instruments, including tranches, under § _.210(d)(2)(iii). This recommendation is reflected in the 33 percent figure cited above.

- ***Second***, the Associations recommend revising the scope of instruments included in the net default exposure calculation in § _.210(d)(2)(iii). The proposed rules text refers to exposures listed in § _.210(d)(2)(i) and (d)(2)(ii), which would include untranched and tranched indices. Single name credit default swaps ("**CDS**") also should be included in the net default exposure calculation in § _.210(d)(2)(iii) to reflect more appropriately the economics of these positions.

G. The risk weight for investment grade covered bonds should be reduced from 2.5 percent to 1.5 percent.

Under the Proposal, covered bonds that are investment grade would receive a 2.5 percent risk weight under the delta CSR capital requirements for non-securitizations.[70] In contrast, under the Basel framework, covered bonds that are rated AA- or higher may be assigned a risk weight of 1.5 percent.

The preamble to the Proposal provides that the proposed approach would "reduce variability in risk-based capital requirements across banking organizations" and indicates that "most U.S. banking organizations hold limited or no covered bonds," such that "the proposed 2.5 percent risk weight should have an immaterial impact on the sensitivities-based capital requirements."[71] However, the market size for covered bonds is approximately $1.3 trillion for the benchmark bonds alone (i.e., covered bonds that are generally issued through a syndication process to

[70] Table 3 to § _.209.

[71] 88 Fed. Reg. at 64,120.

investors in the public markets and have sufficient size to allow for good secondary market liquidity). In 2022, it was estimated that U.S. banking organizations held nearly half (approximately 46 percent) of the market share of all banking organizations.

Given that the capital framework may not rely on credit ratings in light of Section 939A of the Dodd-Frank Wall Street Reform and Consumer Protection Act (the "**Dodd-Frank Act**"), the rules text should implement a 1.5 percent risk weight for investment grade covered bonds rather than the more conservative 2.5 percent risk weight. This approach would be more consistent with the underlying risk of these transactions given that many covered bonds are highly rated. Banking organizations subject to the U.S. regulatory capital rules would otherwise be subject to a significant competitive disadvantage to other banking organizations that are permitted to apply a 1.5 percent risk weight to highly rated covered bonds.

H. The proposed scope of application for the residual risk add-on is too broad and not commensurate with risk.

The Associations support many aspects of the proposed scope of the residual risk add-on, including the exclusions that would be available with respect to (i) GSE debt, (ii) positions for which the banking organization has entered into a third-party transaction that exactly matches the market risk covered position (including positions involving exotic exposures), (iii) spread options (e.g., yield curve and mid-curve spread options) and (iv) internal transactions between two trading desks when only one trading desk is a model-eligible trading desk.[72]

However, additional exclusions and clarifications are needed in order for the residual risk add-on framework to address only the positions that bear the types of risk that the add-on is intended to cover, as set forth below. Additionally, the preamble to the final rule should not reference specific products that would be subject to the residual risk add-on (such as footnote 372 of the Proposal), because terminology for products may not be consistent across banking organizations.

1. The exotic residual risk add-on should not apply if an exposure is captured by either SBM or DRC, or if pricing of an instrument referencing an exotic exposure is not materially dependent on the exotic exposure.

The definition of "exotic exposure" in the Proposal would include an underlying exposure "that is not in scope of any of the risk classes under SBM or is not captured by the DRC."[73] The Proposal would exclude from the delta risk capital requirements a market risk covered position whose value at any point in time exclusively depends on an exotic exposure and would instead require a banking organization to calculate separately the market risk capital requirements for these positions under the residual risk add-on framework.[74]

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[72] § _.211(a).

[73] § _.202(b).

[74] § _.206(b). Under the Proposal, an "exotic exposure" would be defined as "an underlying exposure that is not in scope of any of the risk classes under the sensitivities-based capital requirement or is not captured by the

Although the Associations broadly support the proposed exclusion of these types of exotic exposures from delta risk capital requirements, the final rule should clarify that an exposure would not be considered an exotic exposure if the exposure is captured either in SBM or DRC. In addition, the residual risk add-on should not apply if the pricing of an instrument that references an exotic exposure is not materially dependent on the exotic exposure, subject to the banking organization maintaining policies and procedures to assess the materiality of its exotic exposures and furnishing to its supervisor a list of exposures considered immaterial upon request. For example, with respect to interest rate derivative contracts or cross-currency contracts, the periodic coupon payments may increase by a spread if a certain value of an exotic underlying is reached. For these instruments, the linkage to an exotic underlying does not materially affect the nature of the instrument as an interest rate derivative. Without this change, a banking organization would be subject to excessive capital requirements for instruments that involve exotic underlyings, which could adversely affect the cost, liquidity and availability of innovative instruments that could reduce the ability of end users to hedge financing costs affected by novel risks.

2. The residual risk add-on should be computed on a consolidated basis, allowing netting of notional amounts between positions with identical terms.

Under the Proposal, the residual risk add-on would be calculated based on the gross effective notional amounts of the market risk covered positions subject to the residual risk add-on multiplied by a prescribed risk weight.[75] Per § _.211(a)(5)(i) of the Proposal, where a market risk covered position is a transaction that exactly matches with a third party, both transactions may be excluded from the residual risk add-on.

The Associations interpret the above exclusion to apply to back-to-back transactions with different notional amounts. For example, if a banking organization holds two positions with identical terms except for the magnitude of the notional amount, then the residual risk add-on may be computed on the net notional of the two positions. This treatment would align with the preamble to the Proposal because this "would appropriately reflect the lack of residual risk inherent in such transactions."[76]

Accordingly, this should be viewed as a clarification in respect of the general principle that covered positions with identical terms (other than notional amount) should fall within the scope of back-to-back transactions and the residual risk add-on should be computed on a consolidated basis for these transactions.

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standardized default risk capital requirement, which includes, but is not limited to, longevity risk, weather risk, and natural disaster risk." § _.202(b).

75 § _.211(b)(1).

76 88 Fed. Reg. at 64,129.

3. A collection of instruments that does not have inherent residual risk should not be included within the residual risk add-on, including "Full Capital Structures."

The preamble to the Proposal generally establishes a principle that instruments should be excluded from the scope of the residual risk add-on when there is a lack of inherent residual risk in the transactions.[77]

In the spirit of this principle, when a collection of market risk covered positions together, unambiguously, removes all elements of the residual risk, then this collection of positions should be removed from the residual risk add-on, even if the individual positions would have been in the scope of the residual risk add-on.

For example, this exclusion would apply to a collection of tranches that perfectly replicates a portfolio of vanilla CDS (referred to as a "**Full Capital Structure**" transaction). This collection of tranches is economically equivalent to an index or single-name CDS position with respect to a non-tranched pool and does not bear inherent residual risk. Accordingly, a Full Capital Structure transaction should not be subject to the residual risk add-on.

4. Hedges that mitigate residual risk should not contribute to additional capital requirements in respect of the residual risk add-on.

Under the Proposal, all instruments with residual risk would be subject to the residual risk add-on capital charge, irrespective of whether they generate residual risks or, to the contrary, reduce them. Namely, when a banking organization mitigates residual risks by entering offsetting hedge positions, the hedges would further increase the residual risk add-on charge under the Proposal. Requiring additional capital in respect of strategies mitigating risk would not be aligned with sound risk management practices.

Accordingly, a banking organization should be permitted to exclude these hedges from the scope of the residual risk add-on. In these circumstances, the hedges generally would not remove all residual risks of the original transaction, such that the original transaction would remain subject to the residual risk add-on. Alternatively, according to a banking organization's documented trading and hedging strategy, a banking organization may calculate the residual risk add-on for a portfolio as 100 percent of the larger of the add-ons computed for each side of the portfolio's strategy. These approaches are aligned with proposals in other jurisdictions, such as an amendment to the CRR3 for the EU.

5. The residual risk add-on should not apply to options without path dependent pay-offs or two or fewer underlyings.

Under the rules text of the Proposal, there would be an exclusion from the residual risk add-on with respect to market risk covered positions that are options without path dependent pay-offs or

[77] 88 Fed. Reg. at 64,129 (providing that the exclusion from the residual risk add-on applicable to back-to-back transactions "would appropriately reflect the lack of residual risk inherent in such transactions").

with two or fewer underlyings.[78] In contrast, in the preamble to the Proposal, the exclusion would apply to an option that has two or fewer underlying positions and does not contain path dependent pay-offs.

Positions without path dependent pay-offs or two or fewer underlyings do not present the types of risks that the residual risk add-on was intended to address. Accordingly, the proposed rules text presented the appropriate scope of the exclusion. Therefore, the final rule should reflect the proposed rules text instead of the preamble formulation, such that options without path dependent pay-offs or with two or fewer underlyings would not be subject to the residual risk add-on.

I. The delta equity risk buckets should address equity positions and debt positions in REITs.

The proposed CSR delta buckets for non-securitizations and delta equity risk buckets generally do not address the treatment of equity positions and debt positions in real estate investment trusts ("**REITs**"). Additionally, as specified in the preamble, for equity positions in publicly traded REITs, a banking organization would be required to apply the risk weight applicable to the "Other sector" buckets for purposes of calculating SBM capital requirements. In these circumstances, a banking organization treating a REIT as an equity investment in an investment fund would effectively be required to subject the REIT to the "fallback treatment" for investment funds because the full-look through approach and hypothetical portfolio approach generally would not be available. Assigning REITs to the "Other sector" buckets would be very punitive because capital requirements for instruments in this category are based on the gross sum without recognition of hedging benefits between long and short positions within the bucket.

Publicly traded REITs should be treated as a listed company rather than an equity investment in a fund. Banking organizations should assign REITs to the appropriate sector based on the nature of its business. The most suitable sectors for REITs is "Financials including government-backed financials, real estate activities, and technology." As a general matter, the "Other sector" should apply to companies with unknown or unconventional activities that would not otherwise fall within a specified category. Real estate, on the other hand, is a well-understood category of economic activity and has its own sector identification under the Global Industry Classification Standard ("**GICS**"). Before "Real Estate" had its own GICS identification, the real estate industry group generally was categorized under the financial sector.

The Proposal does not specify the treatment of debt positions in REITs. The credit spread non-securitization risk class does not specifically mention real estate activities, unlike in the context of the equity risk class. There is no basis for the inconsistency between the CSR non-securitization risk class and equity risk class.

Accordingly, a banking organization should assign an equity position in a REIT to "Financials including government-backed financials, real estate activities, and technology." A debt position in a REIT should be assigned to "Financials including government-backed financials" and this

[78] § _.211(a)(4)(iii).

sector should specifically include "real estate activities" for consistency with the equity risk class.

J. The proposed revisions to the securitization framework would result in significantly higher capital requirements for securitization positions.

The Proposal would implement significant revisions to the securitization framework that would result in an unwarranted increase in RWAs, including market RWAs. The industry, in a comment letter submitted by the Structured Finance Association, has prepared detailed recommendations regarding how the Agencies should revise the design and calibration of numerous aspects of the securitization framework.

The Associations support those recommendations and urge the Agencies to consider them carefully in order to mitigate the potential negative effects of the Proposal on important markets for consumers, businesses and the economy more generally.

K. The proposed treatment of PSE exposures under SBM and DRC requires significant revision.

1. The market risk capital treatment of hedges of municipal bonds should address that the hedges reflect the tax-exempt status of the bonds.

Banking organizations hedge municipal bond positions with Treasury or other taxable securities. The hedging strategy often takes into account the fact that municipal bonds have tax-exempt status, whereas Treasury securities (or other taxable securities used as the hedge) are not tax-exempt.

In general, the Proposal does not take into account the tax-exempt treatment of municipal bonds, including that a banking organization will reflect the tax-exempt status of municipal bonds in devising its hedging strategy as an economic and risk management matter. As a result, under the Proposal, even a fully hedged position in a municipal bond will appear to have a residual sensitivity with respect to interest rate risk that would incur a capital charge under SBM. This proposed treatment would result in excessive capital requirements for trading activities in municipal bonds that are not reflective of underlying economics and that would have adverse effects on the liquidity of municipal bond markets and impose higher costs to municipal issues, with resulting higher taxpayer burdens and increased costs for building infrastructure (e.g., roads and bridges).

There are several potential methods to address the tax-exempt treatment of municipal bonds. The rules could explicitly permit a banking organization to scale the sensitivities of a municipal bond to account for the applicable tax rate under SBM. An alternative approach would involve the Agencies specifying reduced risk weights against tax exempt municipal general interest rate risk and credit spread risk curves.

The QIS shows that the Proposal would subject PSE exposures to a 46[79] percent increase in capital requirements compared to current U.S. capital requirements. However, according to the QIS, prescribing a 70 percent scaling parameter to the interest rate risk weight for instruments with municipal bond exposures would instead result in an increase of 27[80] percent in comparison to current capital levels.

2. The proposed DRC treatment for PSE debt positions would be highly punitive when compared to historical data on default recoveries.

Under the Proposal, a banking organization would apply a 25 percent LGD for GSE debt guaranteed by the GSE. This treatment would be broadly aligned with the underlying risk for these exposures. However, the Proposal would not provide similar treatment for PSEs. As a result, most PSEs would receive a 75 percent LGD applicable to senior debt because most PSE exposures are senior debt instruments.[81] Under a recent study regarding the empirical default recovery rates of municipal bonds, the average issuer-weighted recoveries have been approximately 66 percent, corresponding to a 34 percent LGD.[82] Therefore, the Associations recommend using a 50 percent LGD for U.S. PSE debt.

Under the QIS, for all portfolios containing municipal exposures and hedges viewed collectively as one portfolio, the Proposal would yield a 46 percent increase in capital requirements compared to the current U.S. market risk framework. Changing the LGD to 50 percent would result in a 32[83] percent decrease relative to the Proposal, which would broadly keep capital requirements in line with requirements under the current rules.

Separately, the proposed 2.1 percent risk weight for investment grade PSE debt positions is high, particularly as applied to municipal exposures that are investment grade. Under the Basel framework, AAA-rated municipal exposures would be eligible for a 0.5 percent risk weight. Under the QIS, for the set of PSE instruments (i.e., all cash and derivative positions on PSEs), the effective increase under the Proposal due to the higher (and coarser) DRC treatment would be 37[84] percent as compared to the Basel framework.

If our recommendations regarding applying a scaling factor in SBM to recognize the tax-exempt status of municipal bonds and assigning a 50 percent LGD in DRC are accepted, the overall capital increase for PSE exposures would be reduced, though it would still remain 8[85] percent higher than the current U.S. capital requirements for these exposures.

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79 See Appendix 8 – Quantitative Impact Study Results, Index TB_32.

80 See Appendix 8 – Quantitative Impact Study Results, Index TB_33.

81 § _.210(b)(v)(B).

82 Moody's, Investors Service Data Report – US Municipal Bond Defaults and Recoveries 1970-2021 (Apr. 21, 2022).

83 See Appendix 8 – Quantitative Impact Study Results, Index TB_34.

84 See Appendix 8 – Quantitative Impact Study Results, Index TB_35.

85 See Appendix 8 – Quantitative Impact Study Results, Index TB_36.

L. The requirement to calculate the standardized measure for market risk on a weekly basis should be modified to monthly.

Under the Proposal, a banking organization would be required to calculate FRTB-SA at least weekly and calculate FRTB-IMA daily.[86]

In general, calculating the standardized measure on a weekly basis would result in significant operational burdens. These calculations are based on multiple disparate components that will need to be collated to provide accurate estimates. Banking organizations would apply significantly higher standards to each of these components to the extent they determine binding capital requirements, as opposed to figures that are used for purposes of internal risk and capital management purposes. For these reasons, a banking organization should be required to calculate FRTB-SA on a monthly basis, consistent with the Basel framework and other jurisdictions.

M. A banking organization should be allowed to treat onshore and offshore currencies as a single currency and single interest rate curve.

Under § _.208(b)(4) of the Proposal, for interest rate risk, a banking organization would be required to treat an onshore currency curve (for example, locally traded contracts) and an offshore currency curve (for example, contracts with the same maturity that are traded outside the local jurisdiction) as two distinct currencies and would be permitted to treat these curves as a single currency only with prior supervisory approval. On the other hand, the preamble to the Proposal appears to permit treating onshore and offshore as the same currency; however, it would still require a banking organization to have the optionality to treat a currency's onshore and offshore exchange rates as a single risk factor.[87] In this regard, the preamble provides that "[w]hile in stress the foreign exchange risk posed by a currency's onshore exchange rate and an offshore exchange rate may differ, as U.S. banking organizations generally do not have material exposure to foreign exchange risk from a currency's onshore and offshore basis, the prudential benefit of requiring banking organizations to capture risk posed by such basis would be limited, relative to the potential compliance burden."[88]

The Proposal would be a significant departure from the Basel framework and implementation in other non-U.S. jurisdictions. This approach also would lead to regulatory capital outcomes that are inconsistent with risk management practices and raise competitive concerns for banking organizations subject to U.S. regulatory capital requirements. Because interest rate curves represent the forward expectations of the same foreign exchange spot rate (albeit in two different market segments), treating these transactions as entirely separate currencies for purposes of calculating interest rate risk sensitivities would not be consistent with the underlying economics of these transactions. Similarly, treating an onshore currency curve and an offshore currency curve as two distinct curves would raise significant operational complexities and costs for banking organizations, particularly in certain emerging market jurisdictions. These complexities are due to challenges associated with collecting the high quality data inputs that are needed to

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86 § _.204(a).

87 88 Fed. Reg. at 64,114.

88 88 Fed. Reg. at 64,115.

construct a continuous curve with respect to onshore currency curves and offshore currency curves.

Consequently, for purposes of calculating interest rate risk sensitivities, a banking organization should be permitted to treat onshore and offshore currencies as a single currency; within that currency, a banking organization should be permitted, but not required, to treat an onshore curve and an offshore curve as two distinct curves.

N. A banking organization should use its front office models in determining vega sensitivities.

Under the Proposal, a banking organization would be required to calculate the vega capital requirement for market risk covered positions that are options or positions with embedded optionality, including positions with material prepayment risk.[89]

The Proposal appears to provide that a banking organization would use its front office valuation models with respect to generating vega sensitivities and that, accordingly, the fallback treatment would not apply if the banking organization does not generate vega sensitivities with respect to positions for which, although there is some prepayment risk, the banking organization does not generate vega sensitivities. This situation may arise in particular with respect to loans. Similarly, for certain products including corporate bonds and sovereign exposures (such as options on government futures), a banking organization may generate one type of vega sensitivity but not another one. For example, with respect to corporate bonds, a banking organization may generate vega credit risk sensitivities using credit index options but would not generate a vega interest rate risk sensitivity. In these instances, the fallback mechanism should not apply for interest rate vega given the reflection of vega within the credit risk class, consistent with front office pricing models.

O. The scope of the "dimensions" for certain risk factors under FRTB-SA and the assignment for vega in respect of option instruments with undefined maturity needs clarification.

The Agencies should clarify several aspects of the proposed dimensions of the risk factors applicable under FRTB-SA for delta, vega and curvature capital given the terminology used in several sections of the preamble and rule text of the Proposal. With respect to specified delta risk factors, vega risk factors and curvature risk factors, the proposed rule text refers to particular attributes of the position, such as the "tenor,"[90] the "maturity of the option"[91] or the "remaining

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89 § _.206(c).

90 For example, the delta risk factors for interest rate risk would be defined along two dimensions, one of which is the "tenor." § _.208(b)(1)(i)(B).

91 For example, the vega risk factors for equity risk would be defined along "the maturity of the option," in particular 0.5 years, 1 year, 3 years, 5 years and 10 years. § _.208(f)(2).

maturity of the contract."[92] The preamble to the Proposal provides an example in the context of a European interest rate swaption:

> For example, a banking organization would calculate the vega sensitivity of a European interest rate swaption that expires in 12 months referring to a one-year swap based on the maturity of the option (12 months) as well as the residual maturity of the underlying instrument (the swap's maturity of 12 months).[93]

However, certain derivative products will generally not have that type of single, simple "tenor" or "maturity." Nonetheless, in some cases, there are established conventions that could be applied. For example, when the credit spread delta risk factors are defined along the "tenor of the position" a banking organization would use its risk management model to express the risk of the credit position through a set of internal credit benchmarks defined by the model, with one dimension along the credit spread dimension with sufficient granularity. Typically, benchmark CDS contracts would be used for these purposes. This internal risk representation, with credit risks for multiple tenors, then would be mapped to the regulatory definition of the risk factors in § _.208 that correspond to a prescribed set of "regulatory CDS benchmarks." Thus, a general credit risky position will utilize multiple credit delta risk factors—and therefore tenors—in its representation. The terminology "tenor of the position" is precisely correct only when the position itself fits into exactly one of the prescribed regulatory benchmarks.

A banking organization would use a similar approach with respect to other risk classes. For example, in respect of commodities and interest rates, a single contract would typically correspond to two (or more) benchmarks and tenors, which are either those specified in § _.208 or those used in the banking organization's internal valuation or risk management model. In the latter case and when the tenors or maturities differ from those in the prescribed regulatory benchmarks, the banking organization should assign or map the internal risk factors and sensitivities to the regulatory tenors or maturities for purposes of § _.208(a).

Additionally, the Agencies should clarify the vega risk factor definitions across all asset classes. The vega risk factors under the Proposal would be broadly defined under the Proposal in terms of the "implied volatility"[94] and including a dimension for the "maturity of the option" (and for interest rates, a second dimension for the remaining maturity of the underlying).[95] In these circumstances, the risk factors along the "maturity of the option" dimension should refer to the implied volatilities of benchmark option products with maturities as prescribed in § _.208, rather than simply focusing solely on the expiry of the specific "option" for purposes of defining the vega risk factor and implied volatility. In practice, a banking organization would typically use its risk management model to compute vega risk corresponding to a series of benchmark options with corresponding benchmark maturities (or, in the case of interest rates, benchmark option

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92 For example, the delta risk factors for commodity risk would be defined along two dimensions for each commodity, one of which is the "remaining maturity of the contract." § _.208(g)(1)(ii).

93 88 Fed. Reg. at 64,114.

94 For example, the vega risk factors for equity risk would be defined for each issuer and would consist of the implied volatilities of the spot prices of equity risk-sensitive options as defined along the maturity of the option. § _.208(f)(2).

95 § _.208(b)(2)(iii).

maturities and the tenor of the option's underlier). In this way, a single position with optionality or vega risk would correspond to a set of vega risk factors at a variety of option maturities and not simply at a single "maturity" for the option.

A similar concern arises with respect to the requirement in § _.207 to assign maturities in respect of instruments with optionality that do not have a stated maturity to the longest prescribed maturity tenor for vega.[96] Any such position will typically have vega risk at multiple benchmark maturities (or in the case of interest rates, benchmark option maturities and tenor of the option's underlier), as defined by the banking organization's risk management model. Benchmark maturities that exceed the longest maturity prescribed for vega, including any "undefined" or "infinite" maturities, should be assigned to the longest prescribed maturity.

Accordingly, references to positions with optionality and undefined maturity as "instruments" in the preamble or as "market risk covered positions" under § _.207(c) should be with respect to the benchmark representations of the relevant position subject to capital requirements, not the position itself. Relatedly, references in the risk factor definitions in § _.208 to "tenor," "residual maturity of the underlying instrument," "remaining maturity of the contract," "maturity of the option" and "implied volatility" of options should relate to the implied benchmark regulatory positions underlying the risk factor definitions, not to any particular instrument or market risk covered position subject to capital requirements.

P. Securitization indices (CMBX, ABX and PrimeX) should not be required to be decomposed given that the underlying constituents generally are not observable.

The Proposal does not specifically address securitization indices (in particular, CMBX, ABX and PrimeX). In general, decomposing these indices would raise data availability and related issues.

Under § _.208(d)(1)(i) of the Proposal, the delta risk factors for CSR for non-CTP securitization positions would be defined along two dimensions: (i) the tranche credit spread curve and (ii) the tenor of the tranche. A banking organization therefore would decompose the underlying tranches of the securitization index to calculate the CSR for these positions.

However, although prices for the securitization indices are observable, the underlying constituents of the indices typically are not observable. As a result, banking organizations generally set the securitization tranche credit spread curve at the headline index instrument level, and not at the level of the underlying constituents.

Consequently, a banking organization should be permitted not to decompose the securitization index and instead reflect the total credit spread risk for these positions within the appropriate delta bucket for CSR for non-CTP securitizations provided in Table 7 to § _.209 (namely, the commercial mortgage-backed securities bucket with respect to the CMBX index, the sub-prime RMBS bucket with respect to the ABX index and the prime RMBS bucket with respect to the PrimeX index).

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[96] § _.207(c)(3).

With respect to the credit quality category, a banking organization should be permitted to assign the index as investment grade if at least 75 percent of the constituents of the index are investment grade and otherwise assign the index to the corresponding non-investment grade bucket. Regarding seniority for an investment grade index, a banking organization should be permitted to assign the index to a senior bucket if at least 75 percent of the constituents of the index are senior and otherwise assign the index to the corresponding non-senior bucket. This approach would be conceptually similar to the proposed treatment of listed and well-diversified indices, pursuant to which a banking organization may calculate a single sensitivity to the index in specified circumstances.[97]

Q. The liquid market economy framework would result in operational burdens and related costs.

The Proposal generally would provide different equity risk buckets for "liquid market economy" countries and territorial entities and emerging market economy countries and territorial entities.[98] The preamble to the Proposal provides that differentiating liquid market economy countries and territorial entities would "appropriately reflect the higher volatility associated with emerging market equities."[99]

In general, the proposed "liquid market economy" framework would raise operational challenges. Under this framework, a banking organization would be required to monitor and assess the criteria on an ongoing basis to determine whether a country or territorial entity satisfies the prescribed "liquid market economy" criteria. In contrast, under the Basel framework, a specific list of "advanced economies" is provided, which would reduce operational burdens and costs.[100] Accordingly, the Agencies should adopt a list of liquid and non-liquid market economics, consistent with the Basel approach.

R. The proposed risk weight for gaseous combustibles and electricity under FRTB-SA should be reduced and the correlation between them increased.

The Associations support grouping gaseous combustibles and electricity within one commodity bucket for purposes of determining the delta risk weights for commodity risk.[101] However, the risk weight for the gaseous combustibles and electricity bucket should be reduced from 45 percent to 30 percent and the intra-bucket correlation parameter increased from 65 percent to 75 percent to more accurately reflect the historical volatility of these arrangements.

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97 § _.205(d)(1)(ii).

98 Table 8 to § _.209.

99 88 Fed. Reg. at 64,122.

100 Basel Committee, *MAR – Calculation of RWA for Market Risk*, 21.75 (eff. Jan 1, 2023). Under the Basel framework, the enumerated advanced economies are Canada, the United States, Mexico, the euro area, the non-euro area western European countries (the United Kingdom, Norway, Sweden, Denmark and Switzerland), Japan, Oceania (Australia and New Zealand), Singapore and Hong Kong SAR.

101 Table 9 to § _.209. This also would apply for purposes of SA-CVA. Table 9 to § _.225.

As noted in the preamble to the Proposal, a banking organization would use either the spot price or the forward price to measure the price sensitivity of a commodity market risk covered position depending on which risk factor is used by the internal risk management model.[102] In general, a banking organization typically has exposure to this commodity risk bucket through forward contracts and, consequently, uses the forward price to measure the price sensitivity. Market participants typically will hedge forward commodity exposure for a variety of reasons, including in respect of planning for future capital expenditures and because energy derivative exposures often have maturities extending well beyond daily fluctuations in spot markets. Additionally, as an empirical matter, a 30 percent risk weight is more appropriate for forward prices.[103]

S. The risk weight for carbon trading under SBM should be reduced and the correlation parameter reflecting different tenors should be increased.

Under the Proposal, carbon trading would receive a 60 percent risk weight with respect to the delta sensitivity for commodity risk under SBM.[104] In addition, the Proposal would apply a correlation parameter of 99 percent when two tenors are not identical for purposes of SBM.[105] As a result, a carry position in which a banking organization purchases a carbon certificate in the spot market and sells a forward position in the carbon certificate would be subject to a capital charge.

The proposed 60 percent risk weight that would apply to carbon trading under the Proposal is not sufficiently risk sensitive or reflective of the economics of these arrangements. As an empirical matter, in light of the historical volatility of these instruments, a 40 percent risk weight would be more appropriate.[106] A lower risk weight also would be consistent with broader public policy objectives to promote liquidity in the markets for carbon certificates and broadly consistent with proposed implementation in the EU in respect of the EU Emissions Trading System ("**ETS**").[107] Per the QIS and relative to the Proposal, the Associations' recommended risk weight would

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102 88 Fed. Reg. at 64,115.

103 *Joint AFME-ISDA ("the Industry") Response to the PRA CP 16/22 – Implementation of the Basel 3.1 standards*, pp. 98-100 (Mar. 2023), *available at* https://www.isda.org/a/hvJgE/ISDA-Responds-to-PRA-Consultation-on-Basel-3.1-Implementation.pdf.

104 Table 9 to § _.209. This also would apply for purposes of the SA-CVA framework. Table 9 to § _.225.

105 § _.209(b)(6)(iii)(A)(2).

106 ISDA, *Implications of the FRTB for Carbon Certificates: A Global Perspective* (Apr. 21, 2022), *available at* https://www.isda.org/a/ZeVgE/Implications-of-the-FRTB-for-Carbon-Certificates-A-Global-Perspective.pdf; ISDA, *Implications of the FRTB for Carbon Certificates* (July 19, 2021), *available at* https://www.isda.org/a/i6MgE/Implications-of-the-FRTB-for-Carbon-Certificates.pdf. See also *Joint AFME-ISDA ("the Industry") Response to the PRA CP 16/22 – Implementation of the Basel 3.1 standards*, pp. 88-89 (Mar. 2023), *available at* https://www.isda.org/a/hvJgE/ISDA-Responds-to-PRA-Consultation-on-Basel-3.1-Implementation.pdf.

107 EU ETS carbon trading would receive a 40 percent risk weight and non-EU ETS carbon trading would receive a 60 percent risk weight. EU, *Proposal for a Regulation of the European Parliament and of the Council amending Regulation (EU) No 575/2013 as regards requirements for credit risk, credit valuation adjustment risk, operational risk, market risk and the output floor*, Article 325as (Dec. 4, 2023), *available at* https://data.consilium.europa.eu/doc/document/ST-15883-2023-INIT/en/pdf.

reduce FRTB-SA capital requirements for carbon trading by 52[108] percent and the overall FRTB-SA capital requirement for the commodities asset class by 16[109] percent.

Applying a 99-percent correlation parameter to commodity positions reflecting different tenors appears to reflect the cost of storage of physical commodities. However, these storage costs are not present with respect to carbon certificates.

As an empirical matter, a correlation parameter of between 0.995–0.999 percent would be more appropriate. Further, all vintage years should trade as a single commodity for purposes of calculating $\rho_{kl}^{(cty)}$ and reflect the different vintage years when calculating $\rho_{kl}^{(basis)}$.

T. The rules text should specify that an instrument referencing or tracking a listed and well-diversified index would qualify for the treatment for listed and well-diversified indices, and the framework for calculating a single sensitivity for an index should be expanded to indices cleared by a CCP.

Under the Proposal, with respect to market risk covered positions of listed and well-diversified indices, a banking organization may choose not to apply the look-through approach and, instead, calculate a single sensitivity for an index and assign the index to the relevant sector or index bucket provided in § _.209.

First, the rules text should specify that an instrument that references or tracks a listed and well-diversified index would qualify for this treatment. This clarification is needed because an index generally is not listed, and instead only instruments tracking the index are listed.

Second, the rules text should clarify that an instrument referencing an index that is not listed but is cleared by a central counterparty ("**CCP**") also would meet the listed and well diversified index criterion. Some products generally are traded over-the-counter (in other words, not on an registered exchange) but are cleared by a CCP. This approach would be consistent with broader public policy objectives promoting central clearing.

U. There should be a specific bucket applicable to commodity risk indices under SBM.

For purposes of the market risk capital rules, the Proposal does not include a specific delta bucket and associated risk weight for commodity risk indices, whereas there are delta buckets and associated risk weights for certain types of equity indices and indices in respect of non-securitization CSR.[110] As a result, certain commodities indices could be considered an "Other

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108 See Appendix 8 – Quantitative Impact Study Results, Index TB_37.

109 See Appendix 8 – Quantitative Impact Study Results, Index TB_38.

110 Table 9 to § _.209 (Delta Buckets and Risk Weights for Commodity Risk); Table 8 to § _.209 (Delta Buckets and Risk Weights for Equity Risk); Table 3 to § _.209 (Delta Buckets and Risk Weights for Credit Spread Risk for Non-Securitizations).

commodity" subject to higher supervisory risk weights and lower correlation parameters than would be appropriate based on the underlying economics of these commodities indices.[111]

The rules text should implement a specific bucket and associated risk weight and correlation parameter for commodity risk indices. An example of this is the Bloomberg Commodity Index (BCOM), which represents a diversified index of commodities that does not have concentration with respect to a particular commodity bucket specified under SBM.

II Market Risk: FRTB-IMA

The Associations are concerned that the overall FRTB-IMA results represent a significant increase over current capital levels which, if unchanged, would result in increased costs of trading, reduced returns and reduced liquidity in U.S. capital markets, which would negatively affect investors—including Americans saving for retirement—as well as commercial end-users hedging business risks. Furthermore, the issues identified below with respect to FRTB-IMA may result in low implementation of the modelled approach by banking organizations. As we have included herein a significant number of recommendations, the Associations emphasize that these recommendations need to be considered in totality. The recommendations with respect to capital requirements for NMRFs and the PLA test framework in Sections I.A through Section I.D provide some options to the Agencies to adjust the overall calibration of FRTB-IMA in addition to the remaining recommendations.

Industry QIS Results

Based on the QIS results, the total market RWAs assuming current model approval would be 1.73[112] times the current market RWAs. If the Agencies were to implement the mitigation items reflected in Figure 3 below, the combined impact would reduce the market RWA assuming current model approval to 1.24[113] times the current market RWA, which would still represent a substantial increase in market risk capital requirements.[114] Recent periods of observed market volatility (e.g., the COVID-19 period) have shown that the current levels of market risk capital requirements are adequate and that no increase is required. In addition, higher capital requirements would only exacerbate the overlap between market RWA requirements and the GMS applicable under the current U.S. capital framework. Accordingly, market RWA, in particular under FRTB-IMA, should remain at broadly the same level as current market RWA. Additional substantive changes beyond those illustrated below would be needed to accomplish that calibration of FRTB-IMA market RWA. Therefore, the Associations have made additional recommendations regarding the capital requirements for NMRFs, which broadly represent the least risk-sensitive aspect of FRTB-IMA.

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111 Table 9 to § _.209.

112 See Appendix 8 – Quantitative Impact Study Results, Index TB_39.

113 See Appendix 8 – Quantitative Impact Study Results, Index TB_40.

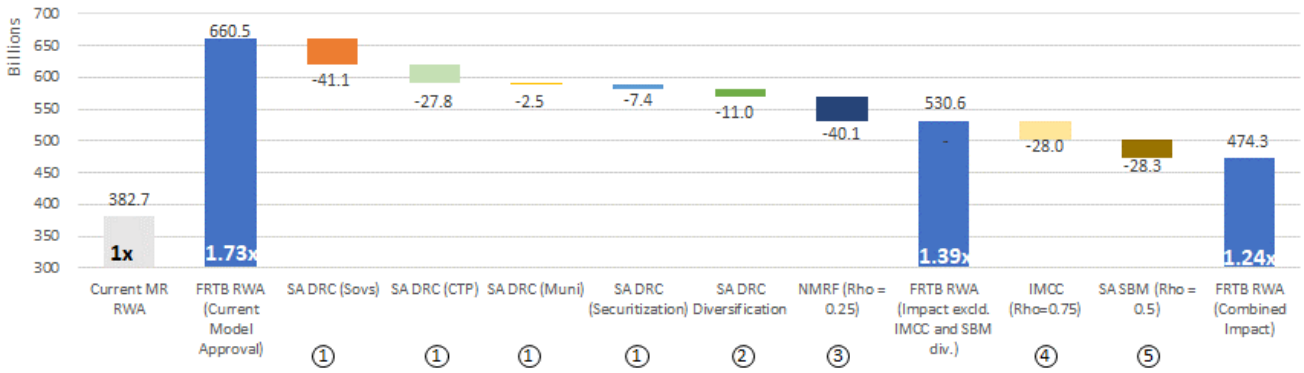
114 These results assume that all desks are "green," and therefore not subject to the PLA test add-on. For further discussion of the PLA test, see Section I.D.

Moreover, whereas the QIS results are based on assuming current models approvals and current estimations of risk factor modellability, there is a considerable degree of uncertainty regarding these assumptions over possible future market conditions, such that there is significant potential variation in the QIS results and reduced incentives for applying FRTB-IMA. Given that a desk may fail a PLA test at any time—which would result in a large increase in RWA as a result of applying FRTB-SA instead of FRTB-IMA—banking organizations likely would need to hold additional capital as a buffer for periodic PLA test failures, which would mitigate the benefits of applying FRTB-IMA. To address the likelihood of banking organizations realizing the benefits of FRTB-IMA, the Agencies should use the PLA test as a monitoring tool because this would provide banking organizations greater certainty in being permitted to apply FRTB-IMA.

Accordingly, even if the Agencies adopted each of the mitigation items with respect to FRTB-IMA listed below, additional revisions to the FRTB-IMA framework would be needed in order for FRTB-IMA capital requirements to remain broadly at current levels for the reasons outlined above.

Impact of FRTB-IMA and Selected FRTB-SA Quantified Mitigation Items:

Figure 3: QIS FRTB IMA & SA RWA Impact (Current Model Approvals)



1. **SA DRC Mitigations**: Implementing SA DRC mitigations for Sovereigns, CTP, Municipal bonds, and Securitizations as discussed in Section I would lead to $79 billion[115] RWA reduction.
2. **SA DRC Diversification**: Calculating SA DRC as single calculation of default risk capital rather than splitting DRC into separate computations for modelled and non-modelled desks would lead to $11.0 billion[116] RWA reduction.
3. **NMRF Diversification**: Decreasing NMRF rho parameter from 0.6 to 0.25 would result in $40.1 billion[117] RWA reduction in SES RWA for modelled desks.
4. **ES Diversification**: Increasing the ES rho parameter from 0.5 to 0.75 would result in $28 billion[118] RWA reduction in ES RWA for modelled desks.

[115] See Appendix 8 – Quantitative Impact Study Results, Index TB_41a.

[116] See Appendix 8 – Quantitative Impact Study Results, Index TB_41b.

[117] See Appendix 8 – Quantitative Impact Study Results, Index TB_42.

[118] See Appendix 8 – Quantitative Impact Study Results, Index TB_43.

5. **SA Diversification**: Introducing an inter risk-class correlation parameter of 0.5 would result in 22 percent[119] reduction in SBM, leading to a $28 billion[120] RWA reduction in FRTB RWA, assuming current model approval.

Although the Associations were not able to quantify fully all effects of our recommended changes to the Proposal, further revisions are needed more broadly as outlined in this letter to avoid negative implications for the U.S. capital markets and resulting effects on CEUs, other businesses and consumers.

A. The proposed calibration of capital requirements for NMRFs would significantly decrease incentives to apply FRTB-IMA.

The Associations are particularly concerned with the proposed calibration of capital requirements for NMRFs. NMRF capital requirements represent a significant proportion of the expected increase in market risk capital requirements and generally decrease incentives for banking organizations to apply the FRTB-IMA. The framework for NMRFs is not appropriately risk sensitive and does not sufficiently recognize diversification within and across asset classes.

In general, certain NMRFs should be subject to capital requirements based on the expected shortfall ("**ES**") methodology, with revisions to reflect the relatively lower level of liquidity of those NMRFs. In particular, risk factors that do not pass the risk factor eligibility test could be classified into: (i) Type A NMRFs, which satisfy the data principles and therefore may be included in the ES methodology, and (ii) Type B NMRFs, which do not have daily data to generate scenarios or do not otherwise satisfy the data principles to apply the ES methodology. Conceptually, Type A NMRFs generally correspond to risk factors that are currently included in VaR-based models under the current market risk framework, and Type B NMRFs generally correspond to risk factors that are not included in VaR-based models.

Under this proposed approach, Type A NMRFs would be capitalized in ES directly. Because these NMRFs generally have a lower liquidity horizon than modellable risk factors, this recommendation would assign the NMRFs to a liquidity horizon that is one level higher than the corresponding liquidity horizon for modellable risk factors (with a cap of 120 days). On the other hand, Type B NMRFs would be capitalized using the stressed expected shortfall ("**SES**") formula provided in the Proposal.

This proposed approach would result in a more risk sensitive regulatory capital calculation for NMRFs and appropriately recognize the benefits of diversification for trading portfolios. It also would result in closer alignment between internal risk management models and capital requirements and provide meaningful incentives for banking organizations to use FRTB-IMA.

The Associations recognize that, under this proposed approach, a banking organization would need to maintain systems permitting it to switch between calculating NMRF capital requirements under the ES and SES formulas. The Associations expect this would not result in significant

[119] See Appendix 8 – Quantitative Impact Study Results, Index TB_44.

[120] See Appendix 8 – Quantitative Impact Study Results, Index TB_45.

operational burdens in comparison to the significant benefits for FRTB-IMA. Further analysis is needed regarding the potential effects of implementing this approach.

B. The proposed calibration of the rho parameter in SES calculation for non-modellable risk factors is too conservative.

The proposed FRTB-IMA would determine capital requirements for NMRFs using the SES calculation. The SES formula would include a rho parameter equal to 0.6 in the SES calculation which, in effect, would recognize the diversification benefits of NMRFs to an inappropriately limited extent.[121]

This calibration of the rho parameter is too conservative and does not properly take into account the benefits of diversification of systematic components of NMRF. The proposed calibration would not accurately reflect the economics of transactions and would significantly limit the utility of the FRTB-IMA. Accordingly, the Associations recommend a rho parameter in SES of 0.25.

C. The SES calculation does not sufficiently recognize diversification.

Under the Proposal, a banking organization would calculate its aggregate capital measure, SES, for non-modellable idiosyncratic credit spread risk factors (i), non-modellable idiosyncratic equity risk factors (j) and the remaining NMRFs (k) in accordance with the following formula:[122]

$$SES = \sqrt{\sum_{i=1}^{I} ISES_{NM,i}^2} + \sqrt{\sum_{j=1}^{J} ISES_{NM,j}^2} + \sqrt{\left(\rho \sum_{k=1}^{K} SES_{NM,k}\right)^2 + (1-\rho^2) \sum_{k=1}^{K} SES_{NM,k}^2}$$

The SES would not recognize diversification within risk class and, instead, would assume that the correlation across all NMRFs is equal. In contrast, the formula for modellable risk factors generally would include higher correlations within risk classes than across risk classes. It would be appropriate for the SES calculation to recognize diversification within risk classes rather than assume the correlation across NMRFs is equal. This could be reflected by revising the SES calculation such that a banking organization first would aggregate NMRFs within a risk class and then aggregate across risk classes, reflecting a lower correlation in the calculation across risk classes.

The SES calculation also would not permit a banking organization to aggregate non-modellable idiosyncratic risk factors except with respect to credit spread risk factors and equity risk factors. A banking organization should be permitted to aggregate other types of non-modellable idiosyncratic risk factors.

In addition, the proposed SES formula would not permit a banking organization to construct NMRF shocks at the level of the particular risk bucket.

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[121] § _.215(d)(2)(vii).

[122] § _.215(d)(2).

A banking organization should be permitted to calculate NMRF capital requirements at the risk bucket level with supervisory approval. This approach would be consistent with the Basel framework[123] and would be more appropriately risk sensitive because it would take into account the benefits of netting and correlations with respect to NMRFs within the same risk bucket.

D. The PLA test framework should be implemented as a monitoring process—consistent with other jurisdictions—and not as a framework that can result in automatic add-ons or model ineligibility.

The Associations recognize that the Agencies seek objective automated testing to assess initial and ongoing model performance at the trading desk level, with direct consequences with respect to desk-level model approval. As a monitoring and reporting requirement under the current U.S. market risk framework, desk-level backtesting has been thoroughly studied and well understood by both the industry and the Agencies through the semi-annual data submissions and analyses. Given this extensive track record, the Associations recommend using desk-level backtesting as the sole binding model performance requirement to provide the objective and automated testing the Agencies seek.

On the other hand, the behavior and performance of the newly proposed PLA test are currently not as well understood. While the PLA tests attempt to overcome one limitation of backtesting through measuring both underestimation and overestimation by the risk model, these tests introduce a potentially more significant limitation by testing the risk model over the entire P&L distribution, i.e., to some extent, these tests "reward" the risk model for more accurately predicting small P&L gains or losses on days with relatively benign market moves—as may be the case in the Kolmogorov Smirnov test—while the main objective function of the model should be to accurately predict extreme losses under large market shocks.

In addition, the Associations have concerns regarding the stability and accuracy of these tests for well-hedged portfolios with relatively small market driven P&L and their ability to handle even small amounts of operational noise stemming from data misalignment or infrastructure issues. In particular, these concerns are even more relevant for the Spearman rank correlation test because, given the above limitations, it can be especially challenging to determine the value indicating a "good" correlation for purposes of the Spearman test, and thresholds calibrated in literature for other domains or use cases may not be applicable in the context of regulatory capital requirements.

The Associations also are concerned with the counterintuitive behavior of these tests for (i) a well-hedged portfolio and (ii) any portfolio during a period of low market volatility. In each of these cases, the relatively small values of hypothetical profit-and-loss and risk-theoretical profit-and-loss make the tests susceptible to even small amounts of operational noise arising from data misalignment or infrastructure issues. Using the PLA test framework to disqualify desks automatically from applying FRTB-IMA would potentially result in significant increases in capital requirements simply as a result of the nature of the PLA tests, as opposed to a genuine

[123] Basel Committee, *MAR – Calculation of RWA for Market Risk*, 33.16 (eff. Jan 1, 2023).

modelling issue. This uncertainty would significantly reduce incentives for banking organizations to invest in FRTB-IMA.

Consequently, the Associations recommend that, similar to significant sub-portfolio backtesting under the current U.S. market risk framework, the PLA tests should be incorporated as a monitoring tool, with banking organizations submitting PLA test results to supervisors on a periodic basis. This approach would allow an opportunity for supervisors to assess whether the proposed tests are fit for purpose, and whether it is possible to calibrate reasonable and meaningful thresholds for these tests. In addition, this would also be consistent with the proposed implementation of the revised market risk standards in certain other jurisdictions, in which the PLA tests will not be incorporated as a binding requirement when the revised standards take effect.

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Additionally, the Associations are concerned that the Proposal would not provide sufficient incentives for a banking organization to use significant resources to build systems to use FRTB-IMA. We therefore also recommend the following revisions.

E. The proposed calibration of the rho parameter for purposes of the ES calculation is not sufficiently risk sensitive.

Under the Proposal, the aggregate capital measure for modellable risk factors in the ES calculation would be computed as the weighted average of the constrained and unconstrained ES-based measures and would use a rho parameter of 0.5.[124]

The proposed calibration of the rho parameter under the ES calculation for modellable risk factors would be too conservative and would not sufficiently take into consideration the benefits of diversification. Accordingly, the calibration of the rho parameter under the ES calculation should be increased from 0.5 to 0.75.

Using data submitted by banking organizations as part of the semiannual monitoring exercises between December 2019 and June 2013 (excluding collection from the March 2020 COVID-19 stress period), a rho parameter of 0.5 results in a total FRTB-IMA figure that is on average approximately 65 percent higher than the fully diversified ES measure, whereas adjusting the rho parameter to 0.75 would result in a total FRTB-IMA figure that would still be 33 percent higher on average than the fully diversified ES measure.[125] Consequently, a modified calibration of 0.75 for the rho parameter would include a degree of added conservatism in FRTB-IMA, while also creating appropriate incentives for banking organizations to implement FRTB-IMA.[126]

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[124] § _.215(c)(4)(i).

[125] The corresponding impacts for the COVID-19 stress period of Q1 2020 are 46 percent higher with respect to a rho parameter of 0.5, and 23 percent higher with respect to a rho parameter of 0.75.

[126] Even with the recommended inter-asset class rho parameter of 0.5 in SBM described in Section I.D, SBM would on average be 45 percent higher than fully diversified VaR.

F. The rules text should implement a cap on the models-based measure for market risk at the amount required for trading desks under the standardized approach.

The Associations support capping the requirements under the FRTB-IMA at the amount required for all trading desks under the FRTB-SA. This upper limit would be consistent with the view of the Agencies that the standardized approach is a credible and risk-sensitive capital measure, and that a banking organization is not required to use a models-based approach.[127] In light of the material challenges a banking organization would need to address in order to implement, maintain and satisfy the PLA testing requirements at the level of trading desks and concerns regarding the SES calculation for NMRFs, implementing an overall cap with respect to a banking organization applying FRTB-IMA would mitigate some of the risk of extreme capital outcomes that are not aligned with the underlying economics.

This approach also would provide appropriate incentives for banking organizations to develop and improve models and procedures to apply the FRTB-IMA, which could benefit both banking organizations and supervisors in enhancing the understanding of market risk, model risks and related processes fundamental to promoting sound risk management practices.

With the suggested upper limit in place, the models-based measure for market risk would equal:

$$IMA_{total} = \min\left(\left(IMA_{G,A} + PLA\ addon + SA_U\right),\ SA_{all\ desks}\right) + fallback\ capital\ + capital\ addons + DRC_{all\ desks}$$

Under this formulation, the standardized default risk capital requirement for all desks would be included as a single measure, and the FRTB-SA and FRTB-IMA components would not include the corresponding DRC requirements, for the reasons discussed in Section I.G.

G. The models-based measure for market risk should not require separate default risk capital requirement calculations.

Under the models-based formula, a banking organization would be required to calculate the default risk capital charge with respect to model-eligible trading desks separately from the default risk capital charge for non-model-eligible trading desks, which would require at least two sets of default risk capital computations. The Associations understand this approach in the context of the Basel framework given that the Basel framework includes both a standardized and models-based methodology for calculating default risk capital requirements. However, the Proposal would not include the models-based methodology. Therefore, there should be a single calculation of default risk capital, as reflected in the following formula:

[127] The Associations acknowledge and appreciate that the Proposal has omitted MAR 30.4(b)(2) of the final Basel market risk framework relating to the selection of standardized desks. Basel Committee, *MAR – Calculation of RWA for Market Risk*, 30.4(2)(b) (eff. Jan 1, 2023). This omission is consistent with the view of the Agencies that FRTB-SA is a credible and risk sensitive measure.

$$IMA_{total} = \min\left(\left(IMA_{G,A} + PLA\ addon + SA_U\right),\ SA_{all\ desks}\right) + fallback\ capital\ + capital\ addons + DRC_{all\ desks}$$

Under this formulation,

- $IMA_{G,A}$ is the non-default risk IMA capital requirement for modelled desks;
- SA_U is the non-default risk SA capital requirement for the non-modelled desks;
- $SA_{all\ desks}$ is the non-default risk SA capital requirement for the global portfolio; and
- $DRC_{all\ desks}$ is the standardized default risk charge for the global portfolio.

H. The SES stress window should be aligned with the stress window used for purposes of the ES calculation.

Under the Proposal, with respect to NMRFs, a banking organization would be required to calculate a capital measure for each NMRF using a stress scenario that is calibrated to be at least as prudent as the ES-based measure used for modellable risk factors and must select a common 12-month period of stress for all NMRFs in the same risk factor class.[128] If the banking organization cannot determine a stress scenario for a risk factor class or a smaller set of NMRFs acceptable to the relevant Federal supervisor, the banking organization would be required to use the scenario producing the maximum possible loss as the stress scenario.[129]

In general, a banking organization should be permitted to use the same stress period for NMRFs as is used for purposes of the ES calculation because the ES stress period represents an appropriate period to reflect market stress for a banking organization. It is operationally burdensome for a banking organization to select and maintain separate stress periods for each NMRF risk class. Selecting different stress periods results in additional breakdown of correlations between NMRF risk classes beyond the already overly conservative aggregation formula.

In addition, the rules text should clarify that a banking organization is permitted to calculate SES capital requirements at the NMRF bucket level with supervisory approval, consistent with the Basel framework.[130]

The Associations support that, under the Proposal, a banking organization would be permitted to use proxies in designing a stress scenario for each risk class of NMRFs if the proxies satisfy prescribed data quality requirements applicable to modellable risk factors.[131] The Associations

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[128] § _.215(d)(1)(i).

[129] § _215(d)(1)(ii).

[130] Basel Committee, *MAR – Calculation of RWA for Market Risk*, 33.16 (eff. Jan 1, 2023).

[131] § _.215(d)(1)(i).

also support permitting, with supervisory approval, a banking organization to use an alternative approach to design a stress scenario for each risk class of NMRFs.

I. There should be flexibility to conduct backtesting on the ES methodology.

In general, under the Proposal, a banking organization would generate backtesting data by comparing actual profit and loss and hypothetical profit and loss with the corresponding VaR-based measure calculated by its internal models for that business day at the 97.5 percentile and 99.0 percentile one-tail confidence levels at the trading desk level.[132] An exception generally would occur when the actual loss or hypothetical profit and loss at either percentile exceeds the corresponding VaR-based measure at that percentile.[133] Under this framework, the backtesting exceptions do not take into account the magnitude of the actual loss or hypothetical profit and loss in excess of the VaR-based measure. A banking organization also would be performing backtesting with respect to a model different from the model used for purposes of regulatory capital calculations.

A banking organization should have flexibility, with supervisory approval, to conduct direct backtesting with respect to the ES methodology rather than with respect to the VaR-based measure. This approach would consider the magnitude of the actual loss or hypothetical profit and loss in excess of the quantile risk measure and would accurately reflect the probability distribution of profit and loss outcomes. This approach also would enhance consistency between backtesting and regulatory capital calculations.

There have been several theoretical publications regarding backtesting on ES. One methodology demonstrates that ES backtesting may have lower Type II error[134] and further enable the aggregate trading portfolio backtesting capital multiplier calculations to move beyond VaR backtesting and the associated simplified Gaussian assumptions.[135]

From a supervisory perspective, the European Banking Authority ("**EBA**") has suggested using ES backtesting for internal validation purposes, noting that it is appropriate to backtest the ES methodology given it is used in computing regulatory capital requirements.[136]

The Associations recognize this approach would result in different metrics for purposes of trading desk eligibility-related backtesting and the aggregate trading portfolio backtesting capital multiplier calculations in § _.204(g). Under this approach, a banking organization would propose trading desk eligibility-related backtesting metrics and an alternative framework for the aggregate trading portfolio backtesting capital multiplier calculations as part of its overall

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132 § _.213(b)(1).

133 § _.213(b)(1)(i).

134 In this context, Type II error refers to a "false negative" result (in other words, incorrectly failing to reject the model).

135 Acerbi, C. & Szekely, B. *The minimally biased backtest for ES*. Risk 2019.

136 EBA, Consultation Paper - Draft Regulatory Technical Standards on the assessment methodology under which competent authorities verify an institution's compliance with the internal model approach as per Article 325az(8) of Regulation (EU) No 575/2013 (Capital Requirements Regulation 2 - CRR2), 2023.

supervisory approval to conduct backtesting on the ES measure rather than the VaR-based measure.

The Associations support the Proposal's incorporation of an exclusion from recognizing a backtesting exception if the exception is due to technical issues unrelated to the model.[137]

J. A banking organization should be permitted to scale up from a shorter time horizon than 10 days with supervisory approval.

Under the Proposal, a banking organization would not be permitted to scale up from a shorter horizon when calculating the time series of changes in risk factors over the base liquidity horizon.[138] In general, although other modelling techniques may be available, a banking organization likely would use a 10-business day overlapping period in light of the established use of historical simulation in the banking industry.

Using 10-business day overlapping returns would lead to significant autocorrelations, which in turn would result in a small effective sample size (in particular, less than 50 for a one-year observation period based on typical measures of effective sample size ("**ESS**") estimation).[139] This would result in a loss estimator that is not sufficiently robust for a 97.5 percent tail average estimation, particularly for stress periods that must be calibrated based on a one-year time horizon (such as during COVID-19).

Table 7 compares shocks based on one-business day returns scaled to 10 business days[140] in comparison to 10-business day overlapping returns at a 99 percent confidence interval for the Bank of America BBB US Corporate Bond Index. In a stable market, an overlapping 10 business day holding period shock is **2x** the scaled one-day shock. In an extreme high-market volatility scenario (e.g., from the impact of COVID-19), it is **3x** the time-scaled one-day shock. This demonstrates the outsized effect that stress periods have on quantiles that are calculated based on an overlapping methodology.

Table 7: 10-Day Overlapping Quantiles Deviate More During Periods of Stress

	Observed 99% Shocks			
	1-Day	1-Day Scaled	10-Day Overlapped	
One Year Stressed Period	13%	40%	123%	**3x**
One Year Stressed Period (excluding data post 2/20/20)	7%	21%	42%	**2x**

[137] § _.213(b)(1)(iii)(A).

[138] § _.215(b)(4).

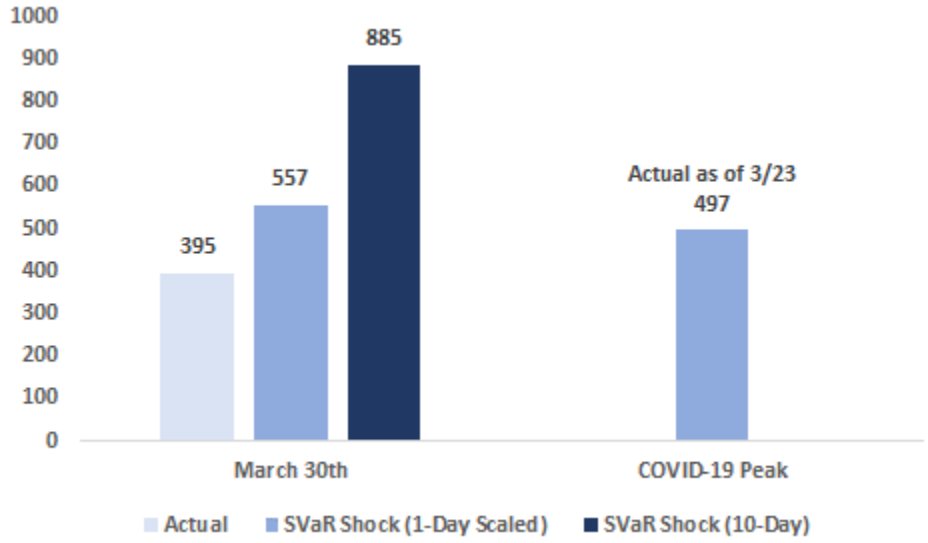
[139] Assuming an actual sample size N of 250 for 10-day overlapping returns, ESS (N_{eff}) can be estimated as $N_{eff} = \frac{N}{1+2\sum_{t=1}^{\infty}\rho_t}$ where ρ_t refers to the correlation of the overlapping returns with lag t. While ESS is an estimation, depending on the underlying data, it likely reduces an actual sample size of 250 to an ESS of less than 50.

[140] The scaling is based on $\sqrt{10}$.

Figure 4 demonstrates that using 10-business day overlapping returns significantly overestimates the actual market spread widening during COVID-19.

- Ten-business day overlapping returns based on the Bank of America BBB US Corporate Bond Index widened from 395 basis points to 885 basis points on March 30, 2020, which is 388 basis points higher than the actual COVID-19 peak in March 2020, and 145 basis points higher than the peak in 2008.
- In contrast, a scaled one-business day holding period data would imply that BBB spreads widen to 557 basis points on March 30, 2020 (60bps higher than the peak in March 2020).

Figure 4: Ten-Day Overlapping Quantiles Predicted Unrealistic Spreads During the COVID Period



This issue regarding using overlapping ten-business day returns would also affect the stress period identification itself.

Furthermore, the EU capital requirements regulation ("**CRR**") does not explicitly preclude a banking organization from scaling risk factor changes from a shorter time horizon.[141] In this context, the Proposal would be unduly prescriptive in requiring a banking organization to use overlapping 10 business-day returns. Scaling the granular shock scenarios to 10-business days in the manner described above would be different from the current U.S. capital rule, in which a

[141] Article 325bc(1)(c) of the CRR defines partial expected shortfall measure as calculated by applying scenarios of future shocks with a 10-day horizon. This is understood to imply that the portfolio revaluations are with 10-day shocks and not referring to the calibration of the shocks themselves. Calibrations of the shocks are referred to in Article 325bc(2)-(4) of the CRR, where no restrictions on scaling from a shorter time horizon are imposed in contrast to the Proposal.

banking organization may scale VaR risk measures from a shorter holding period with supervisory approval.[142]

The method of deriving the 10-business day shock scenarios should be part of the overall supervisory approval of the banking organization's ES models and considerations of shorter time horizon risk factor changes should be permitted. Accordingly, the Associations recommend specifying that a banking organization may scale returns calculated based on a liquidity horizon of less than 10 business days, subject to supervisory approval as part of the standard model submission. This revision could be accomplished by removing the provision at the end of § _.215(b)(4) that restricts a banking organization from scaling up from a shorter horizon.

K. A banking organization should not be required to take into account the maturity of a covered position in determining the liquidity horizon.

Under the Proposal, if the maturity of a market risk covered position is shorter than the applicable liquidity horizon for the position specified under the Proposal, the minimum liquidity horizon for the position would be calculated as the next longer liquidity horizon from the maturity of the market risk covered position.[143] The Associations acknowledge the flexibility that would be provided, in that a banking organization would be permitted—but not required—to take into account the maturity of a market risk covered position for purposes of determining the appropriate liquidity horizon for the position.

However, the preamble to the Proposal provides a more restrictive requirement that, if the maturity of a market risk covered position is shorter than the applicable liquidity horizon for the position, the banking organization would use the next longer liquidity horizon for the maturity of the market risk covered position.[144]

The preamble text should be updated in line with the rules text, such that a banking organization is permitted—but not required—to take into account the maturity of a market risk covered position for purposes of determining the appropriate liquidity horizon for the position. This approach would avoid broken hedges and would be more risk sensitive. In addition, it would be operationally difficult in many circumstances for banking organizations to construct systems to monitor on an ongoing basis the remaining maturity of the position in comparison to the prescribed liquidity horizon.

L. A banking organization should not be required to obtain prior supervisory approval to apply an alternate modelling approach with respect to equity investments in investment funds.

Under the Proposal, a banking organization could use FRTB-IMA for equity positions in an investment fund only if the banking organization is able to identify the underlying positions held by the fund on a quarterly basis. For these positions, the banking organization would apply the

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142 Section 205(b)(1) of the U.S. capital rules.

143 § _.215(b)(11)(ii).

144 88 Fed. Reg. at 64,138.

look-through approach or the hypothetical portfolio approach, or any other modelling approach with prior supervisory approval.

Prior supervisory approval to apply a modelling approach is generally inconsistent with the overall construction of the FRTB-IMA. A banking organization typically does not need to obtain prior supervisory approval in order to use specific modelling techniques for other types of multi-underlying instruments. In general, a banking organization should be permitted to use alternate modelling approaches with respect to equity investments in investment funds without needing to obtain prior approval. Backtesting requirements that a banking organization must satisfy in order to apply the FRTB-IMA would test the adequacy of the banking organization's modelling approach. Similarly, the PLA test framework would permit the Agencies to monitor these alternate approaches in accordance with the recommendation described in Section I.D.

M. The approach to assigning liquidity horizons for liquid and well-diversified indices would lead to unintended cliff effects.

Under the Proposal, a banking organization would be required to assign liquidity horizons for multi-underlying credit or equity instruments by calculating the market value weighted average liquidity horizon of the constituents and rounding up to the next highest liquidity horizon for purposes of the FRTB-IMA.[145] This approach would be excessively punitive and could lead to unintended consequences.

For example, a credit index could have 50 constituents with 49 constituents that are investment grade and one constituent that is speculative grade or sub-speculative grade. This scenario may arise due to differences in ratings used by index providers in comparison to the definitions of "investment grade," "speculative grade" and "sub-speculative grade" provided in the Proposal. In addition, certain issuers could be downgraded over time, such that "off the run" series of CDS indices may contain issuers with ratings that have declined since the construction of the CDS index. In these circumstances, the entire index would be required to be assigned the liquidity horizon attendant to speculative grade or sub-speculative grade indices with respect to credit spread risk, which would result in significant increases in the required liquidity horizon and related regulatory capital requirements that would be incommensurate with the economics of the position.

Further, minor data quality issues also could result in punitive liquidity horizons for well-diversified and liquid indices. For example, if a technical issue resulted in the market capitalization of one of the 500 companies in the S&P500 index not populating in the system, then a conservative fallback logic would consider this company as small cap. Under the Proposal, the S&P500 index would be categorized as a small cap index, resulting in a doubling of the liquidity horizon from 10 days to 20 days.

This type of volatility in the assignment of liquidity horizons, including for the most liquid and well-diversified indices in some circumstances, would lead to cliff effects in regulatory capital requirements in respect of instruments referencing these indices. The proposed approach under FRTB-IMA would also be more conservative than the approach in the FRTB-SA, which would

[145] § _.215(b)(11)(iii).

map listed and well-diversified equity and credit indices to large cap and liquid index bucket (Equity bucket 12) and investment grade index (CSR Non-securitization delta bucket 18), respectively, when at least 75 percent of the notional value or market value of the constituents of the index belong to those respective categories.[146]

Accordingly, the rules text should be revised such that the minimum liquidity horizon for credit and equity indices is based on the nearest to the weighted average of the liquidity horizons of the underlying. Alternatively, the FRTB-IMA approach could be aligned broadly with the approach in the proposed FRTB-SA with respect to assigning buckets for equity and credit indices and multi-underlying instruments, in which the bucketing for an index is determined by the substantial majority of the constituents (at least 75 percent of the notional value of the index).

N. A trading desk applying the models-based approach should not be required to include risk factors (including idiosyncratic risk) that are not material to the trading desk.

Under the Proposal, a banking organization would be required to include all risk factors included in its internal risk management models or models used in reporting actual profits and losses for purposes of calculating the aggregate capital measure for modellable risk factors and non-modellable risk factors.[147] In general, a banking organization would be required to capture both the systematic risk and idiosyncratic risk of modellable risk factors in respect of the data used in its ES model.[148]

This requirement should be clarified such that a banking organization would only be required to include risk factors (such as idiosyncratic risk) included in its internal risk management models or models used in reporting actual profits and losses to the extent that the banking organization also includes the risk factors in the calculation of its risk-theoretical profit and loss.

As a general matter, a banking organization should be permitted to define the set of risk factors subject to capital requirements in its ES and SES calculations, subject to the relevant trading desk meeting all applicable requirements to apply the internal models approach. Any trading desk eligible to calculate market risk capital requirements using the internal models approach would have satisfied the backtesting requirements. Relatedly, in accordance with the recommendation to implement the PLA test framework as a monitoring process, the Agencies would be able to oversee the banking organization's framework for including these risk factors. These requirements and monitoring processes should be sufficient to demonstrate the fitness of the banking organization's model without specifically requiring a trading desk to capitalize risks, including idiosyncratic risk, that are not material to that trading desk. This approach also would be generally consistent with the Basel framework.

In addition, there is some inconsistency between the rules text and preamble to the Proposal regarding idiosyncratic risk factors. In particular, § _.214(b)(5)(iv) of the Proposal provides that

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146 § _.205(d)(1)(ii)(B), § _.205(d)(1)(ii)(C).

147 § _.214(a)(2).

148 § _.214(b)(7)(ii).

a banking organization "may decompose risks associated with credit or equity indices into systematic risk factors within its internal models designed to capture market-wide movements for a given economic, region, or sector" and "may include idiosyncratic risk factors of specific issuers provided there are a sufficient number of real price observations to pass the risk factor eligibility test."[149] The definition of "idiosyncratic risk" refers to "changes in risk factors unique to the issuer." In contrast, the preamble to the Proposal refers to idiosyncratic risk as including "the inherent risks associated with a specific issuance or issuer that would change a position's value but are not correlated with broader market movements" (emphasis added).[150] The rules text is the appropriate formulation and should be implemented in the final rule. Banking organizations generally assess the modellability of idiosyncratic credit risk and equity risk factors only at the level of the issuer, such that an issuer's idiosyncratic credit risk and equity risk factors would be considered modellable if there are sufficient transactions with respect to the issuer (including across the underlying risk factors dimensions a banking organization may use to model specific risk, including tenor, currency and seniority). A banking organization also should be permitted to apply alternative approaches when modelling idiosyncratic credit risk and equity risk factors (including pooled returns) provided the particular issuer passes the risk factor eligibility test. Under this approach, a banking organization would need to model the relevant elements of the issuer's idiosyncratic risk in its ES model and pass the risk factor eligibility test.

Furthermore, the rules text should specify that a banking organization may decompose risks not only for credit or equity indices into systematic risk factors but also other risk classes, including commodities, interest rate and foreign exchange indices where appropriate, particularly when grouping risk factors by region or sector exhibit strong correlations. In these circumstances, a banking organization could model the systematic component using the returns of a representative index or systematic risk factor and model separately the idiosyncratic component. This approach would be consistent with § _.214(b)(7)(ii) of the Proposal, which provides broadly that the data used for calibrating the ES-based measure for modellable risk factors must "capture both idiosyncratic and systematic risk, if applicable."

O. The requirement to audit third-party data providers should not apply to regulated entities.

The Proposal would require that, when a banking organization uses real prices from a third-party provider, the third-party provider must be subject to an audit regarding the validity of its pricing information.[151]

This proposed treatment would not be appropriate for reporting facilities subject to regulatory oversight or are self-regulatory organizations. For example, swap data repositories are subject to regulation and oversight by the Commodity Futures Trading Commission ("**CFTC**"), and

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[149] One aspect of the Proposal is consistent with this language. 88 Fed. Reg. at 64,133 ("The proposal would only allow the banking organization to include idiosyncratic risk factors related to the credit spread or equity risk of a specific issuer if there are a sufficient number of real prices to pass the risk factor eligibility test.").

[150] 88 Fed. Reg. at 64,133, fn. 386.

[151] § _.214(b)(3)(ii).

security-based swap data repositories are subject to regulation and oversight by the SEC, including core principles relating to maintaining accurate data.

Self-regulatory organizations include CFTC-registered designated contract markets and derivatives clearing organizations ("**DCOs**"), which are subject to regulation by the CFTC. Similarly, the SEC regulates and supervises national securities exchanges and clearing agencies, which also are self-regulatory organizations. There is not a principled reason to require an audit with respect to real prices published by a self-regulatory organization that is itself subject to extensive regulatory oversight and supervision.

As a further example, FINRA, a self-regulatory organization that supervises broker-dealers, administers the Trade Reporting and Compliance Engine ("**TRACE**"), which provides real-time price reporting with respect to over-the-counter debt securities.

P. Prices used in determining variation margin exchanged should be considered committed quotes for purposes of RFET.

Valuations of individual derivative contracts for purposes of the exchange of variation margin should be considered a real price that demonstrates the market liquidity for risk factors in specified circumstances.

In general, counterparties to derivative contracts exchange variation margin that reflects the mark-to-market movement of the derivative position since the last exchange of variation margin. For entities subject to the margin requirements for uncleared swaps promulgated by the prudential regulators, the CFTC and the SEC, the counterparties generally exchange variation margin on a daily basis, subject to a minimum transfer amount. When parties exchange variation margin, the parties effectively agree on the current market price of the derivative contract unless the transaction is subject to a dispute.

Therefore, prices used in determining variation margin exchanged between counterparties should qualify in the same manner as committed quotes for purposes of the risk factor eligibility test provided variation margin is determined at the level of individual trades and the transaction is not subject to a dispute between the counterparties.

Q. The proposed formula for determining ES based on a reduced set of risk factors may lead to unintended consequences.

Under the Proposal, the entity-wide liquidity horizon-adjusted ES-based measure based on a reduced set of risk factors would be required to explain at least 75 percent of the variability of the losses estimated by the liquidity horizon-adjusted ES-based measure in the relevant period for the full set of risk factors over the precedent 60 business days. The Proposal would include the following formula that a banking organization would use for this calculation:[152]

[152] § _.215(b)(5)(ii)(C).

$$1 - \frac{\sum_t^{60}\left(ES_{F,C,t} - ES_{R,C,t}\right)^2}{\sum_t^{60}\left(ES_{F,C,t} - Mean\left(ES_{F,C}\right)\right)^2}$$

This formula is too complex and may lead to unintended outcomes, in particular when the denominator is a small number. The formula should be simplified to promote consistency and reduce operational burdens, such as by using a 60-day average of the ratio of the variation of the full ES measure for the reduced set of risk factors. Specifically, the Proposal should include the following formula provided in the Basel framework.[153]

$$ES = ES_{R,S} \times \frac{ES_{F,C}}{ES_{R,C}}$$

Where:

- $ES_{R,S}$ is the ES measure based on a reduced set of risk factors for the stress period;
- $ES_{F,C}$ is the ES measure with the full set of risk factors for the current period; and
- $ES_{R,C}$ is the ES measure with a reduced set of risk factors for the current period.

R. The requirement to determine the stress period based on maximum loss raises operational burdens.

A banking organization would be required to determine the stress period based on the maximum loss on model-eligible trading desks with respect to the full set (or, if permitted, reduced set) of risk factors.[154]

Requiring an absolute maximization of ES (or a similar metric) with respect to determining the stress period would raise significant burdens. This approach may lead to frequent changes in the stress period with minimal impact to the capital calculation. These changes to the stress period to determine the maximum loss would reduce transparency in disclosures and cause challenges for internal and supervisory oversight, with minimal benefit.

To mitigate the operational challenges associated with determining the stress period based on maximum loss, the Associations recommend permitting a banking organization to identify a 12-month period that reflects a period of significant financial stress appropriate to its current portfolio with respect to both ES and SES. That recommendation would be consistent with the current U.S. market risk framework.

[153] Basel Committee, *MAR – Calculation of RWA for Market Risk*, 33.6 (eff. Jan 1, 2023).

[154] § _.215(a)(5).

Additionally, under the Proposal, a banking organization would select a stress period for ES based on the "largest cumulative loss"[155] or "the largest loss,"[156] and similarly for SES based on the "largest cumulative loss."[157] If applied literally, this approach might lead to choosing a benign period with a small ES or SES but with the largest cumulative loss, rather than a period of true stress. Accordingly, the application of the "largest loss" or "largest cumulative loss" should be clarified in the context of both ES and SES.

S. There should be flexibility to apply daily valuation adjustments to HPL.

The Proposal would require any valuation adjustments that are updated daily to be included in hypothetical profit and loss ("**HPL**"). Instead of this type of strict requirement, a banking organization should have flexibility to determine the types of valuation adjustments that should be included in HPL. Many types of daily valuation adjustments (e.g., bid/offer and Independent Price Verification processes) generally are not modelled and therefore would simply add "noise" to HPL in connection with backtesting and the process for monitoring the results of PLA testing processes.

Under the Proposal, internal models would also be subject to backtesting of actual profit and loss against the VaR-based measure, which would serve as a backstop to determine whether the internal model captures the worst case scenario for profit and loss (including all components not necessarily captured by the internal models). Accordingly, backtesting HPL against VaR should be more focused on evaluating the model itself, rather than introducing "noise" that will obscure testing results.

In addition, a requirement to include daily valuation adjustments in HPL would result in a misalignment between HPL and risk-theoretical profit and loss that could lead to additional backtesting exceptions. This approach would inappropriately penalize a banking organization seeking to improve controls and could lead to divergent practices within the industry.

III Market Risk: FRTB-SA and FRTB-IMA

A. The maturity provisions of the DRC should recognize short-dated derivative hedges and OET provisions.

With respect to the DRC, a banking organization would be permitted to (i) assign unhedged cash equity positions to a maturity of either three months or one year and, for cash equity positions hedging derivative contracts, assign the same maturity to the cash equity position as the maturity of the derivative contract it hedges, and (ii) align the maturity of the default risk position with the derivative contract it hedges, when a default risk position can be delivered into a derivative contract it hedges in fulfillment of the contract.[158]

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155 88 Fed. Reg. at 64,140.

156 § _.215(b)(5).

157 88 Fed. Reg. at 64,141.

158 § _.210(a)(2)(iii)(A)(1).

However, a banking organization may also have longer-dated equity derivatives that it hedges with shorter-dated equity derivative transactions, including futures positions. In these circumstances, a banking organization may elect to hedge a longer-dated equity derivative position with a shorter-dated equity derivative position due to enhanced liquidity in the shorter-dated equity derivative position in comparison to a cash position, with attendant risk management and related benefits. The Proposal would not appropriately recognize the risk-reducing effects of short-dated derivative positions that hedge longer-dated derivative transactions because the eligibility for offsetting treatment would be determined by the maturity of the derivative contract.

Accordingly, the final rule should permit a banking organization to recognize fully a shorter-dated derivative contract that hedges a longer-dated derivative contract, consistent with the treatment under the Proposal permitting a banking organization to assign the same maturity to a cash equity position as the maturity of the derivative contract it hedges.

In addition, for purposes of determining the maturity of an equity derivative contract under the DRC, a banking organization should be permitted to take into account an Optional Early Termination ("**OET**") provision. Pursuant to an OET provision, a banking organization may terminate a derivative transaction at any time with minimal notice (e.g., one business day). In these circumstances, the maturity of the derivative transaction with an OET provision should be considered effectively the notice period required to terminate the transaction (e.g., one business day).

B. The Proposal would be unduly prescriptive with respect to subjecting certain equity positions to market risk capital requirements.

The Proposal could be interpreted to require certain types of equity positions to be included within the definition of market risk covered position. This would include publicly traded equity securities and investment funds with respect to which the banking organization has access to the prospectus, partnership agreement or similar contract defining its permissible investments and investment limits and is able to use the look-through approach or obtains daily price quotes for the investment fund.[159] With respect to internal risk transfer, the Proposal provides that "primarily illiquid or irregularly traded equity positions" would be subject to Subpart D or Subpart E of the regulatory capital rules, and that "a banking organization would not be able to hedge the material risk elements of such equity positions in a liquid, two-way market."[160]

The rule is overly prescriptive in ignoring legitimate grounds for publicly traded equity positions or equity investments in a fund meeting the eligibility criteria to be classified as banking book instruments. Examples include publicly traded strategic equity investments, certain seed investments in regulated investment funds and bank-owned life insurance and company-owned life insurance ("**BOLI/COLI**"), which in each case does not carry trading intent.

Accordingly, we recommend that the Agencies clarify that banking organizations may take trading intent into consideration in conjunction with other factors to determine the proper

[159] § _.202(b).

[160] 88 Fed. Reg. at 64,101.

designation. With the potential widening of banking book equities positions, banking organizations may require hedging of banking book equity positions with derivatives that would be considered market risk covered positions. As a result, we recommend including the concept of internal risk transfer with respect to equity risk and aligning the requirements with that of an internal risk transfer for credit risk. The U.S. market risk framework should align with the Basel framework with respect to permitting hedging of equity positions in the banking book and internal risk transfers within the trading book. This proposed approach would permit a non-trading business to hold and hedge equity positions in the form of publicly traded equity securities and for these positions to be capitalized appropriately without the banking organization needing to move these positions to a business that would not otherwise hold or trade the positions. Should the Agencies not revise the proposal to retain the existing treatment of seed investments in investment funds and should these bank-affiliated asset managers now need to comply with the market risk capital requirements for these investments, those entities should be afforded an extended compliance timeframe for establishing such a program.

1. BOLI/COLI should be specifically excluded from market risk capital requirements.

BOLI/COLI are "separate accounts" under the U.S. capital rules currently subject to non-market risk capital requirements under Section 51(a)(2) of the current U.S. capital rules. Similarly, under the Proposal, BOLI/COLI would be subject to equity RWAs for purposes of ERBA under § _.140(a)(2) (which generally corresponds to Section 51(a)(2) of the current U.S. capital rules). However, the proposed Subpart F of the capital requirements does not specifically reference separate accounts.

The rules text should incorporate an express exclusion of BOLI/COLI from market risk capital requirements in Subpart F. These positions would already be subject to credit RWAs. More broadly, it would not be appropriate to include BOLI/COLI in market risk capital requirements because BOLI/COLI (1) is held for a long duration and there is no "trading intent" with respect to these positions, (2) does not allow for practical look-through treatment, and (3) does not allow for sale without forfeiting preferable tax treatment.

2. Banking organizations should be permitted to elect banking book treatment to measure exposures to equity investments in funds.

Under the Proposal, an equity position in an investment fund would be included as a market risk covered position if the banking organization has access to the fund's prospectus and the ability either to look through to the underlying exposures or obtains daily price quotes for the fund. This would include equity exposures to investment funds arising from seed investments made in support of client-facing asset management activities.

This approach would be a significant departure from the current U.S. capital rules, where a banking organization may measure equity exposures to investment funds using banking book rules. The current U.S. capital rules recognize both the specialized nature of seed-related investments and the underlying lack of trading intent, as well as the varying sophistication and scope of the trading activities of banking organizations based on differences in underlying business models.

More importantly, the requirement for banking organizations to use the market risk rules to measure equity exposures to investment funds without regard to business model would produce highly disproportionate capital outcomes—without any change in underlying economic risk—for certain non-broker-dealer banking organizations that may not hedge their investment fund exposures or otherwise have offsetting trading positions. The Proposal does not explain the decision to change the current approach for equity exposures to investment funds, nor does it provide any analysis or data regarding the resulting capital impact, which could be significant. Furthermore, the Proposal does not consider the implications of this increase in capital requirements on the ability of banking organizations to support their clients' asset management-related needs and to compete with both non-bank asset managers and banking organizations not subject to U.S. regulatory capital requirements.

Accordingly, the Agencies should permit a banking organization to elect the use of banking book rules to measure its equity exposures to investment funds, provided the banking organization is able to demonstrate and document the lack of any trading intent. At the same time, allowing the election of trading book rules, as recommended, would provide a banking organization with a risk-sensitive approach to capitalizing the net risk of its exposures to investment funds and associated hedges.

3. Banking organizations should be permitted to treat equity positions arising from employee compensation plans and related hedges as covered positions.

A market risk covered position would not include "equity position[s] arising from deferred compensation plans, employee stock ownership plans, and retirement plans," and instead, such positions would be subject to risk-weighted assets as an equity exposure in the banking book, even though these positions have values linked to publicly traded equity.

Typically, a banking organization will hedge the equity risk associated with equity exposures that arise from employee compensation plans (including equity exposures in investment funds) with equity derivatives, such as futures. To the extent the banking organization applies hedge-pair treatment under the current U.S. standardized approach, these hedges would be excluded from the market risk covered position definition. Otherwise, the hedges would be included in the proposed definition of a market risk covered position given they are derivative trading assets or liabilities linked to publicly traded equity, which would create an apparent divergence between the scope of a market risk covered position for purposes of the current U.S. standardized approach and ERBA. In that case, the proposal would seem to create both a split treatment of positions in the banking book and their hedges in the trading book and eliminate any recognition of the hedges in a banking organization's calculation of risk-weighted assets. Furthermore, even if a banking organization were to apply the hedge-pair treatment under the current U.S. standardized approach and the hedges were to be included in the banking book under ERBA, the hedges would not receive any capital recognition under ERBA given that hedge-pair treatment under ERBA would be eliminated under the Proposal.

The Agencies should amend the definition of a market risk covered position to allow equity positions, including equity positions in investment funds, that arise from employee compensation plans to be treated consistently with their hedges. Specifically, where such positions are hedged,

banking organizations should have the option to treat both the position and the hedge as market risk covered positions to reflect a more risk-sensitive approach by allowing for appropriate recognition of the hedge under FRTB. This would be particularly important if the Agencies decide not to implement hedge-pair treatment under ERBA.

C. The requirement for the terms (other than the amount) of an internal risk transfer to be identical to the terms of the external credit risk hedge to recognize the external hedge as a credit risk mitigant should be removed.

In general, under the Proposal, a banking organization would be permitted to recognize the risk mitigation benefits of an external hedge under Subpart D or Subpart E of the regulatory capital rules if the internal risk transfer meets certain criteria specified in the Proposal.[161] With respect to credit risk, the terms of the internal risk transfer (aside from the amount) must be identical to the terms of the external hedge of credit risk.[162]

A banking organization could novate internal risk transfers to a CCP as a way to externalize the risk transfer. These transactions could be subject to compression. It is not practicable to match precisely a cleared transaction post compression. A banking organization should still be permitted to recognize the risk mitigation benefits of an external hedge of credit risk executed through a CCP even if it cannot subsequently prove perfect externalization following compression.

D. The proposed net short risk position framework should not be incorporated in light of significant operational complexities.

Under the Proposal, the definition of a market risk covered position would include a net short risk position of $20 million or more.[163] A net short risk position would include certain types of short positions, including credit derivatives recognized as guarantees under Subpart D or Subpart E, that exceed the notional amount of a long position for a given exposure of a banking organization.

The Associations appreciate that, in contrast to the Basel framework, the Proposal would include a $20 million threshold, and that a banking organization would be required to calculate net short risk positions on only a quarterly basis.[164] However, the inclusion of net short risk positions as market risk covered positions subject to market risk capital requirements continues to raise fundamental conceptual issues. Accordingly, the Associations recommend that the Agencies eliminate the requirement to subject net short risk positions to the market risk framework. It would not be appropriate to subject net short risk positions to the risk management and related governance requirements for covered positions. In general, any net short risk positions are governed by a banking organization's credit risk monitoring and management frameworks. The positions are not part of a trading business and should not be considered trading positions.

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[161] § _.205(h)(1).

[162] § _.205(h)(1)(i).

[163] § _.202(b).

[164] § _.205(a).

Incorporating the net short risk framework would lead to divergences between prudent risk management practices and regulatory capital requirements given that hedging positions in the banking book may result in additional market risk capital requirements.

In addition, should a final rule nevertheless retain a net short risk position framework, the following issues should be addressed by the proposed framework.

- ***First***, it would not be appropriate to subject net short risk positions to market risk capital requirements to the extent that the banking organization's net short risk position is only temporary. For example, a banking organization may have a loan exposure hedged with a credit default swap. If the borrower on the loan prepays the loan towards the end of the quarter against which the banking organization does not manage to rebalance the hedge in time, a temporary net short-risk position could arise. The resulting net short-risk position should not be subject to market risk capital for the quarter.
- ***Second***, due to the liquidity of single name CDS and equity derivatives, banking organizations may enter into proxy hedges in the form of single name CDS. The Associations recommend that single name proxy hedges be treated in the same manner as index hedges, in particular that the notional amount of the single name proxy hedge may be compared to the notional amount of the related banking book portfolio exposure.
- ***Third***, the notional amount with respect to an option should be the delta-adjusted amount. Under the Proposal, a banking organization would use the notional amount with respect to credit positions and the adjusted notional amount with respect to equity positions. Specifically, the preamble to the Proposal specifies that, for equity derivatives, the adjusted notional amount would be the current share price of one unit of the stock and the number of units referenced by the trade.[165] With respect to an option, the notional amount should reflect the delta component, which addresses the "moneyness" of the option. Otherwise, summing a linear product and an option would not accurately reflect the economics of the positions.
- ***Fourth***, with respect to index CDS, a banking organization should apply the framework for net short risk positions on a portfolio basis holistically without decomposing the index CDS into individual single names. Relatedly, a position that switches from a net short risk position to a net long-risk position and vice versa should not be subject to the capital re-designation add-on.

E. The final rule should clarify that a banking organization may align market risk capital and Volcker Rule trading desks or designate more granular market risk capital units.

Under the Proposal, a banking organization would apply the proposed internal models approach at the level of trading desks.[166] In the preamble to the 2019 revisions to the Volcker Rule, the Agencies noted the revised definition of "trading desk" for Volcker Rule purposes was intended to align with the anticipated definition in a revised version of the U.S. market risk capital rule

[165] 88 Fed. Reg. at 64,097, fn. 252.

[166] 88 Fed. Reg. at 64,102.

implementing the FRTB. Footnote 270 of the Proposal similarly states that the proposed definition of "trading desk" is generally consistent with the definition in the Volcker Rule.[167]

A banking organization should be permitted to define a capital unit for purposes of applying FRTB-IMA at a more granular level than the trading desk concept that applies under the Volcker Rule. In certain circumstances, a single Volcker Rule "trading desk" may undertake a variety of activities, some of which may not be appropriate (or even eligible) for calculating market risk capital requirements using FRTB-IMA. For example, a single Volcker Rule trading desk may engage not only in traditional market-making activities—which generally would be FRTB-IMA eligible—but also engage in securitization and other activities for which the banking organization would not apply the FRTB-IMA when calculating market risk capital requirements. In these circumstances, if a banking organization defines the capital units for FRTB-IMA at a more granular level, then the Volcker Rule documentation requirements should not apply to these granular units.

Defining a FRTB capital unit as a subset of a Volcker trading desk would also address the desk definition differences between FRTB and the Volcker Rule. In this regard, the Proposal would define a trading desk for FRTB purposes to include "a unit of organization of a [banking organization] that purchases or sells market risk covered positions."[168] On the other hand, the definition of "trading desk" under the Volcker Rule refers to "a unit of organization of a banking entity that purchases or sells financial instruments for the trading account."[169] The definition of "trading account" under the Volcker Rule includes positions that are both market risk capital rule covered positions and trading positions (or hedges of market risk capital rule covered positions) and also includes financial instruments the banking organization purchases or sells in connection with dealer, swap dealer or security-based swap dealer activities.[170] Currently, a trading desk for Volcker Rule purposes may buy and sell not only covered positions but may also hold banking book positions in certain circumstances. These positions include holdings of a formerly public company's stock that has gone private, repo-style transactions not reported on Schedule HC-D of the FR Y-9C or other non-trading lending activity. This practice has not historically conflicted with Volcker Rule requirements, but the proposed trading desk definition for purposes of FRTB may be more restrictive. It would be onerous for banks to separate all banking book activity to new desks in light of the FRTB trading desk definition, as this could effectively double the number of desks and related documentation requirements.

Finally, if the provision to create capital units under Volcker Rule trading desks is not granted in the final rules, then a banking organization may need to make its Volcker Rule trading desks more granular than the current designations to meet the FRTB requirements. The Agencies should provide guidance confirming that these re-designations are acceptable and will not result in any adverse inference.

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167 88 Fed. Reg. at 64,102, fn. 270.

168 § _.202(b).

169 Section 3(b)(14) of the Volcker Rule.

170 Section 3(b)(ii)-(iii) of the Volcker Rule.

F. The rules text should exempt transactions between ALM functions and internal trading desks from the capital re-designation add-on.

The rules text should specify that an arm's-length transaction between a banking business engaging in asset-liability management ("**ALM**") and internal trading desks are exempt from the re-designation requirements. Cost and operational efficiency can be achieved from ALM functions purchasing and selling securities from its portfolio. The proposed re-designation framework would either force ALM functions to transact with external counterparties or calculate and maintain a capital add-on that would either increase transaction costs or impose related costs resulting from higher capital and operational burden. Accordingly, we recommend that the Agencies expand the exemptions from the re-designation framework to include transactions in high quality liquid assets ("**HQLA**"), consistent with the framework in Canada.[171]

The rules text also should specify that error correction is not subject to the re-designation framework. A banking organization should be given a grace period in connection with internal controls and governance processes when determining the appropriate designation. If a banking organization identifies and corrects an error during this process, that should be viewed as a correction of the initial designation, not as a re-designation subject to an add-on.

G. REITs and related vehicles should be eligible for market risk capital treatment.

Under the Proposal, the proposed definition of market risk covered position would exclude an exposure to an investment fund that has material exposure to the instrument types that are listed in paragraphs (2)(i) through (2)(viii) of the proposed definition.[172]

With respect to REITs, the preamble to the Proposal provides that "[c]onsistent with past guidance from the agencies, indirect investments in real estate, such as through REITs or special purpose vehicles, would not be direct real estate holdings and could be market risk covered positions if they meet the proposed definition."[173] However, the exclusion from the definition of market risk covered position for investments funds with material exposure to the instrument types listed in paragraphs (2)(i) through (2)(viii) of the proposed definition would result in many REITs not qualifying as market risk covered positions. The rules text should specify that indirect investments in real estate, such as through REITs or related vehicles, would be market risk covered positions if they otherwise meet the definition.[174]

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171 See, e.g., Office of the Superintendent of Financial Institutions, Capital Adequacy Requirements Chapter 9 – Market Risk, Section 74(4), *available at* https://www.osfi-bsif.gc.ca/Eng/fi-if/rg-ro/gdn-ort/gl-ld/Pages/CAR22_chpt9.aspx#ToC925.

172 § _.202(b).

173 88 Fed. Reg. at 64,098.

174 See Section I.I for a discussion of REIT matters in the context of FRTB-SA.

H. Instruments with embedded derivatives elected for the fair value option, such as structured notes, currently subject to market risk capital requirements should remain eligible for market risk treatment.

The definition of a market risk covered position would include an embedded derivative on instruments the banking organization issued that relates to credit or equity risk that it bifurcates for accounting purposes.[175] Under this treatment, if the banking organization reports the entire hybrid instrument at fair value under the fair value option as an accounting matter (in other words, it does not bifurcate the instrument for accounting purposes), the instrument would be a market risk covered position only if it otherwise met the proposed definition, such as if it is a trading position reported as a trading asset or trading liability.

In general, instruments with embedded derivatives, such as structured notes, issued by a banking organization that are currently treated as covered positions subject to market risk capital requirements should continue to be market risk covered positions under the final rule, irrespective of the accounting treatment (fair value or bifurcation) and placement on the balance sheet. These instruments often have material market risk elements that are hedged with derivatives subject to market risk capital requirements. In these circumstances, the embedded derivative and related hedges should be treated as covered positions. This treatment could be effectuated in the final rule through including in the list of positions treated as covered positions (even when the position is not a trading asset or trading liability, or hedges of such positions) any positions with trading intent subject to the banking organization's market risk management policies and procedures, irrespective of the balance sheet lines on which they are reported.

I. The scope and approach for the fallback capital requirement needs clarification.

A banking organization would be required to apply the fallback capital requirement when it is not able to apply the standardized approach for model-ineligible trading desks or the internal models approach to model-eligible trading desks, as well as to securitization positions and CTPs excluded from the capital add-on for ineligible positions on model-eligible trading desks.[176] The fallback capital requirement would apply to equity positions in an investment fund on a model-eligible trading desk where the banking organization is not able to identify the underlying positions held by the investment fund on a quarterly basis. The fallback capital requirement would be equal to the sum of the absolute fair value of each position subject to the fallback capital requirement unless the banking organization receives prior supervisory approval to use an alternative method to quantify the market risk capital requirement for these positions.[177]

In general, the Associations acknowledge that the fallback capital requirement is important to address positions for which the banking organization is not able to calculate market risk capital requirements. However, the Associations are concerned the fallback capital requirement under

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[175] § _.202(b).

[176] § _.204(d)(1), § _.204(f).

[177] § _.204(d)(1).

the Proposal could be interpreted to have an overly broad scope. In particular, the preamble to the Proposal provides:

> For example, a banking organization may not be able to calculate some risk factor sensitivities or components for one or more market risk covered positions due to an operational issue or a calculation failure. Such issues could arise when a new market product is introduced and the banking organization has not had sufficient time to develop models and analytics to produce the required sensitivities or the new data feeds for the proposed market risk capital calculations. In such cases, the proposal would require a banking organization to apply the fallback capital requirement to the affected market risk covered positions.[178]

The Proposal could be read to suggest that an inability to generate capital for one tenor with respect to interest rate delta risk capital requirements for a single day could require the banking organization to use the fallback capital requirement.

The Associations recommend the rules text clarify that only trades or positions in which material components of SBM and DRC are missing are within the scope of the fallback capital requirement. Under this recommendation, a banking organization would have policies and procedures specifying what constitutes a material component missing from SBM and DRC, which would be subject to supervisory review and approval.

In addition, when fallback treatment is triggered, § _.204(d)(2)(i) of the Proposal would require a banking organization to exclude positions subject to the fallback capital requirement from the SBM and DRC measures. However, it may not be aligned with risk to remove all risk factors from the capital calculation. This can occur, for example, when a risk included in capital calculations is part of a hedging strategy such that removing the risk would result in hedge breakage and a related increase in capital. Accordingly, § _.204(d)(2)(i) should be revised to provide that a banking organization may—but is not required to—remove the remaining risk factors from the capital calculations.

J. The calculation of gross default exposure for purposes of default risk capital requirements is too prescriptive.

Under the Proposal, a banking organization would calculate gross default exposure on long and short exposures based on the LGD rate, notional amount (or face value) and cumulative profit and loss already realized on the position, in accordance with the following formulae.

$$Gross\ default\ exposure_{(long)} = \max\big((LGD\ rate \times notional\ amount + P\&L), 0\big),$$

$$Gross\ default\ exposure_{(short)} = \min\big((LGD\ rate \times notional\ amount + P\&L), 0\big).$$ [179]

As a general matter, although this formula is workable for cash positions, it is not appropriately designed or sufficiently risk sensitive with respect to non-cash positions. This prescriptive formula should be replaced with a more general definition of gross default exposure based on the

[178] 88 Fed. Reg. at 64,111.

[179] § _.210(b)(1)(iii).

change in value of the relevant instrument due to a default, including any resulting cash flows that become due as a result of default, at a recovery consistent with the prescribed LGD rate. A banking organization should be permitted to use a model to calculate gross default exposure. The approach under the Proposal would result in broken hedges and other non-economic outcomes that would create misalignment between risk management and capital requirements.

In addition, with respect to applying the look-through approach for multi-underlying instruments (including equity investments in investment funds), the use of a zero recovery rate would result in broken hedges and other non-economic outcomes.[180] For these instruments, the recovery rate should be based on the prescribed LGD rates. The gross default exposure calculation also should take into account any cash flows that would become due to the banking organization as a result of the default. This may occur with respect to certain credit derivative contracts.

K. There should be a specific LGD rate for secured debt for purposes of the default risk capital requirements.

Senior debt generally would be assigned a 75 percent LGD rate with respect to non-securitization debt positions.[181]

In general, the Proposal would not account for differences between secured debt and unsecured debt, other than with respect to covered bonds. However, other types of secured lending—in particular, first-lien loans—that historically have a lower LGD rate than would be provided for under the Proposal, could lead to lower liquidity and higher borrowing rates for small businesses in particular. The ability of collateral to reduce loss rates upon default should be reflected in the Proposal. For that reason, a 40-percent LGD rate should apply with respect to non-securitization debt positions secured on a first-lien basis. This is supported by recent research from rating agencies such as Moody's and S&P. For example, a nonpublic data set for a recent five-year period (including the COVID-19 period) demonstrated significantly higher recovery rates for first-lien secured debt in comparison to recovery rates for senior unsecured debt.

L. The proposed risk weights for investment grade non-securitization debt or equity positions would be more punitive than those imposed under the Basel standards.

The default risk weight for investment grade non-securitization debt or equity positions would be 4.1 percent, in contrast to the 0.5 percent assigned to AAA-rated exposures under the Basel framework. Based on the QIS results, the impact of the proposed risk weights for investment grade non-securitization debt or equity positions in the Proposal in comparison to the Basel framework is an increase of 4[182] percent in market risk capital requirements.

Although the Associations understand that the Agencies would not be permitted to look to external ratings for these purposes in light of Section 939A of the Dodd-Frank Act, the granularity of the default risk weights for investment grade non-securitization debt or equity

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[180] § _.210(b)(1)(iv).

[181] § _.210(b)(1)(v)(B).

[182] See Appendix 8 – Quantitative Impact Study Results, Index TB_46.

positions should be recalibrated such that they are not more punitive on average than the Basel risk weights.

M. The requirement to establish intraday exposure limits for trading desks would raise significant burdens and costs without a corresponding benefit.

Under the Proposal, a banking organization would be required to comply with specified requirements regarding the active management of market risk covered positions, including to establish clear trading limits (including limits on intraday exposures) for each trading desk.[183]

Banking organizations already monitor intraday risks to obtain early indication of any end-of-day breaches and to understand fluctuations in the risk profile of their portfolios. However, prescriptive intraday risk management requirements, such as establishing intraday exposure limits, would result in significant burdens and costs without commensurate risk management benefits. One-sided intraday exposures are routine during a business day, for example, following an execution of a client trade and prior to executing a hedge. Requiring formal risk management processes on an intraday basis for these types of routine and temporary exposures would mostly highlight "false positive" breaches. Analyzing and documenting these types of "false positive" breaches for risk management, senior management or regulatory reporting purposes would result in banking organizations spending less time on more important risk management activities.

N. The application of the cap for market risk capital requirements for securitization positions and defaulted or distressed covered positions at the maximum loss should be clarified.

Under § _.205(b) of the Proposal, a banking organization may cap market risk capital requirements of securitization positions and defaulted or distressed market risk covered positions at the maximum loss of the position.

First, the preamble to the Proposal provides that defaulted and distressed market risk covered positions would be included only in the DRC and would not be required to be included in SBM or the residual risk add-on of the standardized approach, or the non-default capital requirement for modellable and non-modellable risk factors, on the basis that these positions trade based on recovery.[184] In contrast, the rules text in the Proposal, § _.205(b)(2), refers to defaulted positions but does not specifically address distressed positions. Therefore, the Associations recommend specifically aligning the treatment for distressed positions with the treatment applicable to defaulted positions on the basis that distressed positions also trade only on recovery.

Second, § _.205(b)(2) specifically references securitization, defaulted and distressed positions, which is appropriate because these are examples of the types of market risk covered positions in which the market risk capital requirement is likely to exceed the maximum loss. However, this general principle should apply to all market risk covered positions, in particular that the capital requirement of a single position should be capped at its maximum loss.

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[183] § _.203(c)(3).

[184] 88 Fed. Reg. at 64,145-46.

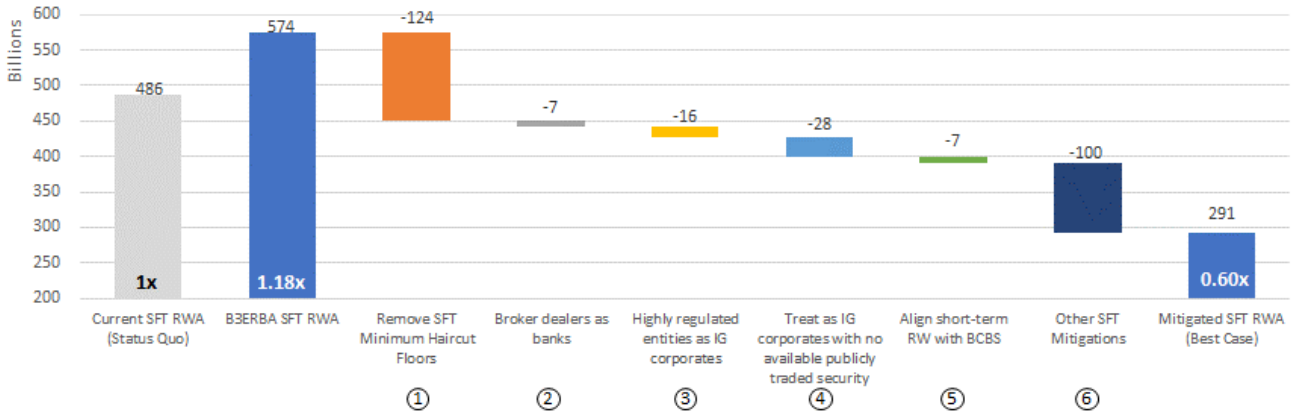
In terms of the mechanics for applying the cap for market risk capital requirements at maximum loss, a banking organization should be permitted to express the cap as a 100-percent risk weight and LGD for purposes of the DRC calculation. This circumstance could arise with respect to a securitization that is assigned a 1,250 percent risk weight under the banking book capital requirements. In all cases, a position capitalized at maximum loss reflected in one component of market risk capital would not be required to be included in any other components of market risk capital, similar to § _.205(b)(2). This would permit a banking organization to include certain risks, e.g., where removal would result in a hedge breakage and a further increase in capital requirements.

IV Recommendations Regarding the Proposed Minimum Haircut Floor Framework for Securities Financing Transactions

Industry QIS Results

Based on the QIS results, the total ERBA SFT RWA would be 1.18[185] times the current SFT RWA. If the Agencies were to implement the below mitigation items, the combined impact would reduce the SFT RWA to 0.60[186] times the current ERBA SFT RWA. The ERBA would permit a more risk-sensitive SFT exposure methodology and would assign a preferential risk weight for certain investment grade entities. As a result, an overall reduction in ERBA SFT RWA would be expected under ERBA. The recommended mitigation items would further enhance the risk sensitivity of ERBA.

Figure 5: QIS SFT RWA Impact



Impact of SFT Quantified Mitigation Items:

1. **Removal of SFT Minimum Haircut Floors**: Reduction of $124 billion[187] RWA.
2. **Treat broker dealers as banks**: Reduction of $7 billion[188] RWA.

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185 See Appendix 8 – Quantitative Impact Study Results, Index TB_47.

186 See Appendix 8 – Quantitative Impact Study Results, Index TB_48.

187 See Appendix 8 – Quantitative Impact Study Results, Index TB_49.

188 See Appendix 8 – Quantitative Impact Study Results, Index TB_50.

3. **Assign lower IG corporate risk weight of 65 percent to highly regulated IG entities even if no publicly traded security is issued by the entity or its parent**: Reduction of $16 billion[189] RWA.
4. **Assign lower IG corporate risk weight of 65 percent to IG corporates even if no publicly traded security is issued by the entity or its parent**: (impact does not include highly regulated entities): Reduction of $28 billion[190] RWA.
5. **Align short-term RW for banks with that of the Basel framework**: All bank exposures of less than or equal to three months subject to lower risk weight in Table 2 to § _.111: Reduction of $7 billion[191] RWA.
6. Mitigation items below would cumulatively lead to an additional $100 billion[192] RWA reduction:
    - Allow netting set exposure calculation (with diversification benefit) for single transactions/margin loans.[193]
    - Expand collateral eligibility to allow recognition of all investment grade corporate debt as financial collateral (i.e., remove the public listing requirement).
    - Remove collateral requirement from market risk election.

Although the Associations were not able to quantify fully all effects of our recommended changes to the Proposal, further revisions are needed more broadly as outlined in this letter to avoid negative implications for the U.S. capital markets and resulting effects on CEUs, other businesses and consumers.

A. The minimum haircut floor framework should not be implemented in light of significant conceptual and operational issues.

The minimum haircut floor framework should not be implemented in the United States.

The Associations are concerned that implementing minimum haircut floors in the manner contemplated by the Proposal could have significant adverse effects on important financial markets, including securities-borrowing and securities-lending markets. The current chair of the SEC, and the SEC more generally, have recently recognized the importance of securities lending and borrowing in the U.S.[194] Commenters on the SEC's securities lending proposal also

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189 See Appendix 8 – Quantitative Impact Study Results, Index TB_51.

190 See Appendix 8 – Quantitative Impact Study Results, Index TB_52.

191 See Appendix 8 – Quantitative Impact Study Results, Index TB_53.

192 See Appendix 8 – Quantitative Impact Study Results, Index TB_54.

193 This impact is understated because only 2 out of 6 banking organizations that contributed data to the QIS have not extended the exposure calculation (with diversification benefits) for single transactions and margin loans in the ERBA baseline and therefore recognize a benefit. In other words, for 4 out of the 6 banking organization the ERBA baseline already reflects this benefit and therefore in this line item the impact is zero.

194 SEC, *Reporting of Securities Loans*, 86 Fed. Reg. 69,802 (Dec. 8, 2021) (proposed rule); Statement of Chair Gary Gensler, *Proposed Updates to Securities Lending Market* (Nov. 18, 2021), *available at* https://www.sec.gov/news/statement/gensler-securities-lending-market-20211118 (Gensler Statement).

emphasized the important role of securities-borrowing and securities-lending markets in enhancing market liquidity and price discovery.[195]

The rationale for the minimum haircut floor framework provided in the Proposal is "the risk exposure of banking organizations to non-bank financial entities that employ leverage and engage in maturity transformation but that are not subject to prudential regulation," and that "[t]he absence of prudential regulation makes such entities more vulnerable to runs, leading to an increase in the credit risk of these entities in the form of a greater risk of default in stress periods."[196]

This is not an appropriate rationale for imposing the minimum haircut floor framework in light of the adverse effects it would have on financial markets and the cliff effect if a transaction or netting set of in-scope transactions does not satisfy the minimum haircut floor requirements. Indeed, the proposed implementation of the minimum haircut floor could result in certain securities financing transactions becoming uneconomical for banking organizations subject to the minimum haircut floor framework. This approach may simply shift these transactions outside the bank regulatory perimeter and into unregulated financial institutions, which could facilitate increased leverage outside the regulated banking system and concentrate risk in unregulated institutions.[197]

Other jurisdictions outside the United States, including Canada, the EU, Japan and the United Kingdom ("**UK**"), have not implemented minimum haircut floors.[198] With respect to the EU, the EBA in particular has referenced a number of concerns regarding potential implementation of the

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[195] See, e.g., Healthy Markets Association, *Reporting of Securities Loans, File No. S7-18-21* (Mar. 2, 2022), *available at* https://www.sec.gov/comments/s7-18-21/s71821-20118360-271249.pdf; Risk Management Association, *Comment Letter on the SEC's Proposed Rule to Provide Transparency in the Securities Lending Market* (Jan. 7, 2022), *available at* https://www.sec.gov/comments/s7-18-21/s71821-20111669-265012.pdf.

[196] 88 Fed. Reg. at 64,063.

[197] In a recent speech, FDIC Chair Martin Gruenberg addressed risks arising out of non-banks. Remarks by FDIC Chairman Martin J. Gruenberg at the Exchequer Club on the Financial Stability Risks of Nonbank Financial Institutions (Sept. 20, 2023), *available at* https://www.fdic.gov/news/speeches/2023/spsept2023.html ("The [Financial Stability Oversight Council] ("**FSOC**"), the Office of Financial Research, and individual FSOC agencies should work together to establish a reporting framework to ensure that the FSOC has appropriate information to assess the financial stability risks of nonbanks and the activities in which they engage, and to ensure that public reporting is sufficient for market participants to appropriately understand the counterparty risks associated with individual nonbank financial institutions.").

[198] European Banking Authority, *Policy Advice on the Basel III Reforms on Securities Financing Transactions (SFTs)*, (Aug. 2, 2019), *available at* https://www.eba.europa.eu/sites/default/documents/files/documents/10180/2886865/870bbd5e-ae8f-4933-9f36-784c7183c7f4/Policy%20Advice%20on%20Basel%20III%20reforms%20-%20SFTs.pdf ("**EBA SFT Policy Advice**"). The Prudential Regulation Authority ("**PRA**") in the UK stated it "is not consulting in this [Consultation Paper] on the implementation of minimum haircut floors for securities financing transactions (SFTs) in the capital framework – one of two approaches envisaged in the FSB's report Regulatory framework for haircuts on non-centrally cleared securities financing transactions. The PRA will consider whether implementation in the capital framework is appropriate in due course, taking into account data available under SFT reporting." Prudential Regulation Authority, *CP16/22 – Implementation of the Basel 3.1 Standards* (Nov. 30, 2022), *available at* https://www.bankofengland.co.uk/prudential-regulation/publication/2022/november/implementation-of-the-basel-3-1-standards.

minimum haircut floor framework, including with respect to (i) the overall scope of institutions and transactions that would be subject to the framework, (ii) the effects of the framework on important financial markets, such as securities borrowing transactions, (iii) the anomalous results that may occur from applying the proposed minimum haircut floor formulae, and (iv) the application of the framework in the context of netting sets.[199] Accordingly, the EBA noted it "believes a cautious approach is warranted before proceeding with the implementation in the EU of the minimum haircut floors framework in the capital framework as designed in the Basel standards" and "[c]onsequently, the EBA recommends at this stage to withhold the implementation in the EU of the minimum haircut floors framework for SFTs in the capital framework as designed in the Basel III post-crisis reforms standards."[200]

The EBA further noted it

> suggests that the issues identified above should be carefully considered before proceeding with the implementation. Other unintended consequences (e.g. potential impacts on market-making activities or short selling) highlighted by stakeholders above, as well as the issues linked to the practical implementation of the framework (e.g. the definition of its scope and mechanics), if indeed appropriate concerns, should likewise be considered and addressed before proceeding with the implementation.[201]

As a result, implementing the minimum haircut floor framework would lead to competitive disadvantages for banking organizations subject to the U.S. capital rules in comparison to firms operating in the EU and the UK that are not subject to this framework. Additionally, because the U.S. capital rules apply to banking organizations on a consolidated basis, the Agencies, in effect, would be imposing minimum haircut floors on non-U.S. subsidiaries engaging in transactions in non-U.S. markets notwithstanding a policy decision by home-country regulators not to implement minimum haircut floors. In this way, the proposed framework would be both under-inclusive—because it would not apply to broker-dealers not affiliated with a bank holding company—and over-inclusive—because it would apply to the activities of bank holding companies on a global basis, even if non-U.S. regulators have adopted different collateral or margining practices.

Notwithstanding the recommendation not to implement the minimum haircut floor framework, the Associations appreciate that, under the Proposal, the scope of the framework would be limited to certain eligible margin loans and repo-style transactions with "unregulated financial institutions," which would exclude funds registered under the Investment Company Act of 1940, pension funds and foreign equivalents.

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199 EBA SFT Policy Advice at Section 2.3.

200 EBA SFT Policy Advice at Section 2.4.

201 EBA SFT Policy Advice at Section 2.4.

The QIS results indicate removing the minimum haircut floor framework would lead to a 26[202] percent reduction in RWAs for all securities financing transactions with unregulated financial institutions.

B. For netting sets with both in-scope and out-of-scope transactions, only transactions that are in scope should be treated as uncollateralized exposures if the netting set does not satisfy the portfolio-based minimum haircut floor.

The preamble to the Proposal states that "[i]f a netting set contains both in-scope and out-of-scope transactions, the banking organization would apply a portfolio-based floor for the entire netting set"[203] and that "[i]n-scope transactions that do not meet the applicable minimum haircut floor would be treated as uncollateralized exposures."[204] Therefore, the preamble is clear that, for netting sets, the potential "uncollateralized" penalty would apply only to in-scope transactions. However, § _.121(c)(3)(iii) could be read to suggest that the penalty would apply to both in- and out-of-scope transactions in light of the following language: "if the portfolio haircut *H* is less than the portfolio haircut floor the banking organization may not recognize the risk-mitigating effects of financial collateral that secures the exposure." Based on the QIS results, not including the risk-mitigating benefits of financial collateral received on all securities financing transactions with unregulated financial institutions for a netting set upon breaching the minimum haircut floor would result in an increase in RWAs associated with these transactions of 44[205] percent.

Accordingly, the Associations seek confirmation that, if a netting set does not meet the portfolio-based minimum haircut floor, only in-scope transactions should be treated as uncollateralized exposures. This would be consistent with the Basel framework, which provides generally that, if a portfolio haircut breaches the floor, then the in-scope SFTs are treated as unsecured loans.[206] This also is consistent with the proposed single-transaction haircut floor calculation, for which a banking organization would apply the minimum haircut floor only to in-scope transactions and would treat only in-scope transactions as uncollateralized exposures if the minimum haircut floor is not satisfied.[207] It would not be appropriate to provide worse treatment to a netting set of in-scope and out-of-scope transactions executed under a qualifying master netting agreement because these agreements are important risk management tools that permit a banking organization to terminate and close out transactions on a net basis.

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202 See Appendix 8 – Quantitative Impact Study Results, Index TB_55.

203 88 Fed. Reg. at 64,064, fn. 124. However, the flow chart provided in the preamble to the Proposal suggests a transaction that is not an in-scope transaction is exempt from the minimum haircut floor framework and collateral may be recognized. 88 Fed. Reg. 64,065, Figure 1.

204 88 Fed. Reg. at 64,064.

205 See Appendix 8 – Quantitative Impact Study Results, Index TB_56.

206 Basel Committee, *CRE – Calculation of RWA for credit risk*, 56.7, 56.12 (eff. Jan 1, 2023).

207 § _.121(d)(3)(ii).

C. The proposed minimum haircut floor framework should not apply to securities borrowing transactions.

Under the Proposal, a transaction in which a banking organization "borrows securities for the purpose of meeting a current or anticipated demand, including for delivery obligations, customer demand, or segregation requirements, and not to provide financing to the unregulated financial institution" would be exempt from the minimum haircut floor requirements.[208] The Associations recognize that this exemption was intended to address securities borrowing and lending markets and have suggested recommendations to clarify the scope of the exemption.

As a general matter, the minimum haircut floor framework should not apply to typical securities borrowing transactions, consistent with the current application of margin requirements applicable to SEC-registered broker-dealers under the Federal Reserve's Regulation T.[209]

In a typical securities borrowing transaction, the banking organization would be providing a haircut, as opposed to receiving a haircut.[210] Under Rule 15c3-3 of the Securities Exchange Act of 1934, a broker-dealer is required to collateralize a borrowing transaction from a customer at a minimum of 100 percent.[211] Therefore, from the perspective of the minimum haircuts formula, the securities borrower is always under-collateralized with respect to a typical securities borrowing transaction. Broker-dealer subsidiaries of a banking organization would be unable to comply with both Rule 15c3-3 and the proposed minimum haircut floor framework at the same time. Conceptually, therefore, applying minimum haircut floors to a securities borrowing transactions would not be appropriate.[212]

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208 § _.121(d)(2)(ii)(C).

209 The Associations recognize that the Proposal would implement an exemption from minimum haircut floors in respect of a transaction in which a banking organization borrows securities for the purpose of meeting a current or anticipated demand, including for delivery obligations, customer demand or segregation requirements, and not to provide financing to the unregulated financial institution. § _.121(d)(2)(ii)(C). In order to rely on this exemption, however, a banking organization would be required to maintain "sufficient written documentation that such transaction is for the purpose of meeting a current or anticipated demand." As discussed in the letter, the requirements for the exemption are not appropriate in light of current regulatory requirements and market practices.

210 See, e.g., EBA SFT Policy Advice Section 2.2.2 ("[Securities borrowing transactions] are typically under-collateralised from the perspective of the bank, since the bank is providing more collateral to the securities lender for borrowing the security (e.g. to borrow a security valued 100 the bank would have to provide 105 in cash as collateral to its counterparty); therefore, these transaction would fall below haircut floors and would be subject to the punitive capital treatment envisaged by the rules."); 86 Fed. Reg. 69,804 ("Securities lending is the market practice by which securities are transferred temporarily from one party, a securities lender, to another, a securities borrower, for a fee.").

211 17 C.F.R. § 240.15c3-3(b)(3)(iii).

212 For further discussion, *see* ISDA, Institute of International Finance, *BCBS consultation – Minimum haircut floors for securities financing transactions: Technical Amendment* (Mar. 31, 2021), *available at* https://www.isda.org/a/WEFTE/BCBS-consultation-%E2%80%93-Minimum-haircut-floors-for-securities-financing-transactions.pdf.

1. The rules text should exclude securities borrowing transactions with respect to current or anticipated uses or needs.

In addition, banking organizations typically enter into securities borrowing transactions for purposes of facilitating client demand, as opposed to generating leverage. In the context of proposed amendments to its Regulation T, the Federal Reserve noted that "stock loans…are based on the need to make delivery and are not meant to be financing arrangements for the owner of the securities being lent."[213] As a result, the observation in the preamble to the Proposal that "securities financing transactions can be used by a counterparty to achieve significant leverage – for example, through transactions where the primary purpose is to finance a counterparty through the lending of cash"[214]—does not apply to securities borrowing transactions. Reducing the ability of banking organizations to engage in securities borrowing transactions in a competitive manner could significantly and adversely affect the liquidity and efficiency of financial markets. Securities lending and securities borrowing activities provide important benefits to capital markets in the United States and globally.

To the extent the final rule does not exclude all securities borrowing transactions from minimum haircut floors, the final rule should provide that the minimum haircut floor framework does not apply to transactions in which the banking organization, acting as securities borrower, has current or near-term reasonably anticipated uses or needs for an equivalent or greater amount of securities, including, but not limited to, one or more of the following purposes:

- Settlement or delivery obligations;
- Custodial possession, control or safekeeping requirements;
- Anticipated securities loans and client short covering, repurchase transactions or other securities financing transactions or other similar requirements; or
- On-lending to another entity that has such a purpose.

Each of these purposes relates generally to the efficient functioning of the securities markets, consistent with the broad objectives of Regulation T, the Federal Reserve's securities credit regulation applicable to SEC-registered broker-dealers. In that context, the Federal Reserve has permitted broker-dealers to engage in securities borrowing transactions "for the smooth operation of the securities markets," in particular with respect to short sales and fails to receive securities.[215] Specifically, the permitted purpose test exempting broker-dealers from minimum margin requirements, pursuant to Section 220.10(a) of Regulation T, is met if the borrowing is

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213 Federal Reserve, Securities Credit Transactions; Review of Regulation T, Credit by Brokers and Dealers, 60 Fed. Reg. 33,763, 33,769 (June 29, 1995).

214 88 Fed. Reg. at 64,063.

215 60 Fed. Reg. at 33,770. The Federal Reserve has also addressed the "permitted purpose" requirements for broker-dealer securities lending and securities borrowing in Section 220.10(a) of Regulation T with respect to dividend reinvestment and purchase plans. In that context, the Federal Reserve noted that "allowing a broker-dealer to borrow customer securities to take advantage of a dividend reinvestment and purchase plan could allow customers to obtain greater credit than could be obtained via a conventional margin loan and unlike borrowing to cover a short sale or fail is not necessary for ***efficient functioning and clearing of transactions in the securities market***." Federal Reserve, *Securities Credit Transactions; Borrowing by Brokers and Dealers*, 63 Fed. Reg. 2,806, 2,811 (Jan. 16, 1998) (emphasis added).

for the "purpose of making delivery of the securities in the case of short sales, failure to receive securities required to be delivered, or other similar situations."[216] Therefore, securities that are borrowed pursuant to Regulation T's permitted purpose exemption should satisfy the third minimum haircut exemption.

In addition, the final rule should provide that the minimum haircut floor framework would not apply to a transaction in which the securities borrower is a foreign person, or is borrowing to re-lend to a foreign person, with respect to a foreign security for any purposes lawful under the laws applicable to the securities borrower. This approach is important to avoid undue competitive disadvantages to banking organizations subject to U.S. regulatory capital requirements with operations abroad. The Federal Reserve has recognized this important objective in the context of Section 220.10(b) of Regulation T, which generally permits a broker-dealer to lend foreign securities to a foreign person (or borrow the securities to relend them to a foreign person) for any purpose lawful in the country in which they are to be used.[217] In that context, the Federal Reserve recognized comments raising concerns regarding a U.S. broker-dealer being "disadvantaged vis-à-vis foreign broker-dealers if their ability to lend foreign securities is curtailed once those securities are listed for trading in the United States" and broadened the foreign securities exception from the "permitted purpose" test under Regulation T.[218] It would not be appropriate to apply the minimum haircut floor framework to the non-U.S. operations of banking organizations subject to U.S. regulatory capital requirements when the applicable home-country regulators have not.

Finally, the final rule should specify that a banking organization may satisfy the "written documentation requirement" through its ordinary course books and records that reflect the purposes described above. Without this clarification, the term "sufficient written documentation" in this context is ambiguous and, depending on how it is implemented, potentially inconsistent with existing regulatory requirements and market practices. We are concerned that the term could be construed to refer to documentation between a securities borrower and lender or some other documentation that a banking organization must generate, perhaps even on a transaction-by-transaction basis. In most cases, whether or not the banking organization has a "permitted purpose" can be determined only by the banking organization itself, by reference to the "uses" of the borrowed securities reflected on the books and records of the banking organization entity that seeks to benefit from the exemption, known only by and only relevant to the banking organization. As a result, as compliance or non-compliance will be demonstrable, in almost all instances, by references to the books and records of the relevant entity, it would impose undue burdens to require banking organizations to produce new documentation for these purposes, whether involving the securities lender or not. This is particularly the case for transactions outside the United States, given that broker-dealers subject to Regulation T already maintain documentation that should satisfy the Regulation T requirement.

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[216] 12 C.F.R. § 220.10(a).

[217] 12 C.F.R. § 220.10(b).

[218] 63 Fed. Reg. at 2,811.

2. The proposed exemption from minimum haircut floors for cash reinvestment should be expanded to include reinvestment in instruments without stated maturity that can be redeemed or liquidated quickly.

The Proposal would include an exemption from minimum haircut floors with respect to a transaction in which an unregulated financial institution lends, sells subject to repurchase or posts as collateral securities to a banking organization in exchange for cash and the unregulated financial institution uses the cash to fund one or more transactions with the same or shorter maturity than the original transaction with the banking organization.[219] In general, the preamble to the Proposal provides that these transactions would be excluded on the basis that "these transactions do not pose the same credit and liquidity risks as other in-scope transactions and serve as important liquidity and intermediation services provided by banking organizations."[220]

This proposed exemption that would apply under the Proposal when the unregulated financial institution uses cash to fund transactions with the same or shorter maturity should include reinvestment by the unregulated financial institution in instruments that do not have a stated maturity but that can be redeemed or liquidated quickly, including money-market mutual funds, demand deposits and similar instruments. These types of instruments may not literally have a "maturity" within the meaning of the Proposal, but this type of reinvestment by the securities lender should qualify for the exemption because, in these circumstances, the securities lender is not using the cash provided by the banking organization as financing.

Similarly, the minimum haircut floor framework should not apply to repo-style transactions in which the unregulated financial institution reinvests cash collateral in such a way that it retains sufficient liquidity to satisfy transaction unwinds. This type of investment activity is consistent with demand-driven securities lending, in which the securities lender reinvests cash collateral received to receive returns greater than the amount owed under the securities lending transaction.

Accordingly, the final rule should contain an exemption in respect of a transaction in which an unregulated financial institution maintains, invests or otherwise uses the cash collateral received in a repo-style transaction such that the unregulated financial institution maintains sufficient liquidity across the collateral collected from repo-style transactions done with the applicable banking organization to meet any unwinds of the original transactions. These uses should include, but not be limited to, investments in cash or liquid and readily marketable securities. By definition, these types of securities can be readily liquidated to return cash to the banking organization, as necessary. Further, as provided in the Preamble, firms should be able to rely on representations made by the unregulated financial institution to satisfy this exemption.[221]

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219 § _.121(d)(2)(ii)(A).

220 The preamble to the Proposal provides that the haircut floors "are derived from observed historical price volatilities as well as existing market and central bank haircut conventions." 88 Fed. Reg. at 64,064.

221 88 Fed. Reg. at 64,064.

D. The minimum haircut floor framework should not apply when a banking organization lends cash in exchange for GSE debt securities or MDBs and explicitly for U.S. sovereign securities.

Under the Proposal, minimum haircut floors would not apply with respect to an eligible margin loan or repo-style transaction in which a banking organization lends cash in exchange for non-defaulted sovereign exposures.[222] The Associations strongly agree that a transaction in which the banking organization lends cash in exchange for non-defaulted sovereign exposures should be exempt from the minimum haircut floor framework.

However, given the importance of U.S. government securities to global financial markets and the fact that § _.111 of the Proposal explicitly would assign a zero percent risk weight to an exposure to the U.S. government, the scope of the minimum haircut floors should provide an explicit exemption for U.S. Treasuries. Specifically, transactions in which the banking organization lends cash in exchange for U.S. Government securities should be exempted more explicitly by including within § _.121(d)(2)(i)(A) an exemption in which the banking organization lends cash to an unregulated financial institution in exchange for securities and all of the securities are exposures to the U.S. government under § _.111(a)(1). This recommendation would help to improve the certainty and consistency of the capital treatment for such transactions, support the ongoing liquidity of the Treasury market, and reduce potential volatility for these transactions, including to the extent debt ceiling-related developments raise the question regarding whether U.S. sovereign securities could be in technical default.

Furthermore, the Proposal does not include a specific exemption for eligible margin loans or repo-style transactions in which a banking organization lends cash in exchange for debt securities issued by a GSE. Based on the QIS results, exempting GSE securities from the minimum haircut floor framework would reduce RWAs for securities financing transactions with unregulated financial institutions by 3[223] percent.

There should be an explicit exemption from minimum haircut floors with respect to any type of repo-style transaction (including repurchase or reverse repurchase transactions and securities lending or securities borrowing transactions) and eligible margin loan to the extent that the securities the unregulated financial institution posts as collateral or sells subject to repurchase to a banking organization are debt securities issued by GSEs (e.g., Fannie Mae and Freddie Mac bonds or mortgage-backed securities). This exemption would be consistent with how GSE debt securities generally are viewed and would be consistent with, for example, FINRA Rule 4210, pursuant to which U.S. Treasury securities and GSE debt securities are treated in the same manner for purposes of FINRA broker-dealer margin requirements.

GSE debt securities are generally perceived to have low credit risk and play an important role in the U.S. financial system and in particular the stability and affordability of the mortgage market and broader housing market in the United States. Applying the minimum haircut floor

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222 § _.121(d)(2)(i)(A).

223 See Appendix 8 – Quantitative Impact Study Results, Index TB_57.

framework to GSE debt securities could adversely affect the liquidity and efficiency of the markets for GSE securities.

The exemption should also apply when a banking organization lends against instruments issued by MDBs or supranational entities subject to a 0 percent risk weight under § _.111 of the Proposal.

E. The minimum haircut floor framework should not apply to the client-facing leg of cleared transactions.

The Proposal provides that the minimum haircut floors must be applied to specified transactions with an unregulated financial institution that are not cleared transactions.[224]

The rule text should clarify that the client-facing leg of a cleared transaction also would not be in scope for the minimum haircut floor framework. For these transactions, the primary purpose of the transaction is not to finance the counterparty through lending cash. Instead, the banking organization provides access to a central counterparty to its customer, which promotes public policy objectives of reducing systemic risk through central clearing generally and will accommodate increases in U.S. Treasury repo clearing as a result of a recent SEC final rule that will require increased clearing of U.S. Treasury repos.[225]

Moreover, with respect to cleared transactions, market participants rely on the central counterparty with respect to determining minimum margin requirements, including measures to reduce procyclicality. As an example, SEC-registered clearing agencies providing central counterparty services are subject to minimum margin requirements.[226]

F. The proposed haircuts with respect to MDB exposures, exposures to supranational entities and GSEs should be reduced to 0 percent.

The Proposal would prescribe minimum haircut floors that would apply based on the type of instrument.[227]

Exposures to MDBs and supranational entities should receive a 0 percent haircut under the minimum haircut floor framework. In general, market participants typically do not require haircuts with respect to transactions in MDB exposures and exposures to supranational entities.

In addition, the Associations are concerned that GSEs debt securities would be subject to the minimum haircuts applicable to "corporate and other issuers." GSE debt securities play an

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224 § _.121(d)(2)(i).

225 SEC, Standards for Covered Clearing Agencies for U.S. Treasury Securities and Application of the Broker-Dealer Customer Protection Rule With Respect to U.S. Treasury Securities (Dec. 13, 2023), *available at* https://www.sec.gov/files/rules/final/2023/34-99149.pdf. As reflected in the Response to Question 55 in Appendix 2, the scope of the minimum haircut floor framework should not be expanded to include U.S. Treasuries.

226 17 C.F.R. § 240.17Ad-22(e)(6).

227 Table 2 to § _.121.

important role in the U.S. financial system in particular the stability and affordability of the mortgage market and broader housing market in the United States. Applying an overcalibrated haircut floor to GSE debt securities could adversely affect the liquidity and efficiency of the markets for GSE securities. GSEs also serve important functions in the financial markets, including with respect to repo markets (including triparty repo).[228] The haircuts applicable to GSE debt securities in the triparty repo context also are generally consistent with the haircuts that apply to U.S. Treasuries.[229] Accordingly, GSE debt securities should receive a 0 percent haircut consistent with the haircut that would apply to U.S. government securities. Grouping GSE collateral with U.S. Treasuries would be consistent with how GSE debt securities generally are viewed pursuant to FINRA Rule 4210, where U.S. Treasury securities and GSE debt securities are treated in the same manner for purposes of FINRA broker-dealer margin requirements. Additionally, under the current and proposed capital rules, lower risk weights apply to GSE exposures than corporate exposures and the liquidity coverage ratio ("**LCR**") regulations apply a lower haircut to GSEs than to investment grade corporate debt securities.[230]

Debt issued by PSEs that would receive either a 20 percent or 50 percent risk weight under ERBA should also have minimum haircut levels that are lower than the haircuts that would be applicable to "corporate and other issuers" given that lower risk weights apply to PSE exposures under the current and proposed capital rules in light of their lower risk profile.

The proposed haircuts in respect of the minimum haircut floor framework under the Proposal do not specifically address gold. As a result, gold would receive a 10 percent haircut as an "other exposure type" under the Proposal with respect to arrangements in which a banking organization provides financing against both securities and gold.[231] Because main index equities and gold would be subject to the same market price volatility haircut under ERBA in connection with applying the collateral haircut approach,[232] gold similarly should receive a 6 percent haircut for purposes of the minimum haircut floor framework, consistent with main index equities.

Similarly, the proposed haircuts in respect of the minimum haircut floor framework under the Proposal do not specifically address convertible bonds and, as a result, convertible bonds would receive a 10 percent haircut as an "other exposure type" under the Proposal.[233] Because convertible bonds in which the reference equity belongs to a main index would be treated in the

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[228] Mark E. Paddrik, Carlos A. Ramirez, Matthew J. McCormick, *The Dynamics of the U.S. Overnight Triparty Repo Market* (Aug. 2, 2021), *available at* https://www.federalreserve.gov/econres/notes/feds-notes/the-dynamics-of-the-us-overnight-triparty-repo-market-20210802.html ("**Triparty Repo Dynamics**") ("Although different types of securities can be used as collateral in triparty repos, most overnight triparty repos are collateralized with U.S. Treasury and agency securities.").

[229] See Triparty Repo Dynamics, Figure 3(b).

[230] Securities issued by (or guaranteed as to the timely payment of principal or interest by) a U.S. GSE that is investment grade generally is treated as a level 2A liquid asset under the LCR. In contrast, an investment grade corporate debt security is treated as a level 2B liquid asset. Under the LCR, a 15 percent haircut is applied to level 2A liquid assets and a 50 percent haircut is applied to level 2B liquid assets.

[231] Table 2 to § _.121.

[232] Table 1 to § _.121.

[233] Table 2 to § _.121.

same manner as main index equities and gold for purposes of the market price volatility haircuts under ERBA in connection with applying the collateral haircut approach, convertible bonds in which the reference equity belongs to a main index should also receive a 6 percent haircut under a minimum haircut floor framework.

G. The rules text should specify that, for the single-transaction and portfolio haircut floor calculations, the exposure amount is based on all collateral and the collateral amount is based on financial collateral and non-financial collateral.

Under the Proposal, with respect to single-transaction haircut floors, the haircut H is determined based on the ratio of the fair value of "financial collateral" borrowed, purchased subject to resale, or taken as collateral from the unregulated financial institution (parameter C_B) to the fair value of "financial collateral" lent, sold subject to repurchase, or posted as collateral (C_L), expressed as a percentage.[234] In contrast, with respect to the proposed portfolio haircut floors, the parameters used to determine the haircut H are not limited to "financial collateral" in the same manner as the single-transaction haircut floors.[235]

For single-transaction haircut floor calculations, both financial and non-financial collateral should be used to determine the haircut H. This would be consistent with the development and calibration of the minimum haircut framework by the Financial Stability Board ("**FSB**").[236] The minimum haircut framework is not a regulatory exposure calculation, which generally only permits financial collateral to offset exposure. Instead, "[t]he proposed framework for minimum haircuts on non-centrally cleared securities financing transactions would reflect the risk exposure of banking organizations to non-bank financial entities that employ leverage and engage in maturity transformation but that are not subject to prudential regulation."[237] The FSB Minimum Haircuts framework underscores this by referring to market participants' haircuts on collateral, and not financial collateral as defined under the Basel framework, in connection with recommendations for "the qualitative standards for methodologies used by market participants that provide securities financing to calculate haircuts on the collateral received" and "a framework of numerical haircut floors… in which financing against collateral…is provided."[238] Additionally, the FSB Minimum Haircuts framework reinforces this point by stating "market participants should conduct their own assessment as to the appropriate level of haircuts to apply in individual circumstances, considering all relevant risk factors."[239]

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234 § _.121(d)(3)(ii)(A).

235 § _.121(d)(3)(iii).

236 FSB, Transforming Shadow Banking into Resilient Market-based Finance: Regulatory framework for haircuts on non-centrally cleared securities financing transactions (updated Sept. 7, 2020), *available at* https://www.fsb.org/wp-content/uploads/P070920-1.pdf ("**FSB Minimum Haircuts**").

237 88 Fed. Reg. at 64,063.

238 FSB Minimum Haircuts, p. 1.

239 FSB Minimum Haircuts, p. 6.

Therefore, a banking organization's single-transaction exposure amount (represented by parameter C_L) should be based on all collateral, not just financial collateral, that the banking organization lends, sells subject to repurchase or posts as collateral.

Similarly, the collateral amount (represented by parameter C_B) should include non-financial collateral because the use of these types of collateral in the transaction will reduce the counterparty's ability to obtain additional secured funding from other banking organizations or market participants and therefore constrains the ability of the counterparty to obtain additional leverage.

This recommendation also would be generally consistent with the Basel framework, which generally provides that the parameters that would correspond to C_L and C_B under the Proposal are based on the net positions in securities lent or borrowed and without an express restriction to securities that are financial collateral.[240] This recommendation would not affect the manner in which a banking organization may recognize collateral for purposes of the collateral haircut approach.

H. The minimum haircut floor calculation should consider collateral in transit.

For purposes of determining whether the minimum haircut floor is satisfied, a banking organization should be permitted, but not required, to take into account collateral that it has called from the counterparty but that has not yet settled. In many cases, collateral is settled on a T+1 basis, such that a banking organization that calls additional collateral from its counterparty would not receive the collateral until the next business day. Given the severe cliff effects if the minimum haircut floor is not satisfied, the framework should take into account market practices regarding settlement.

This approach also would generally be consistent with the Basel framework, which provides that, for purposes of the minimum haircut floor calculation, "collateral that is called by either counterparty can be treated collateral received from the moment that it is called (i.e., the treatment is independent of the settlement period)."[241] In this regard, the purpose of the minimum haircut floor framework is distinct from the calculation of exposure amount under the collateral haircut approach. Reflecting collateral in transit would appropriately take into account the degree of collateral associated with the transaction in the context of the minimum haircut floor framework, which is focused on the amount of leverage provided to unregulated financial institutions.

I. The rules text should clarify that the minimum haircut floor framework does not apply for purposes of determining credit exposure under the SCCL.

Currently, a banking organization subject to the single-counterparty credit limit ("**SCCL**") rules can use any method the banking organization is authorized to use under either Subpart D or the

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[240] Basel Committee, Minimum Haircut Floors for Securities Financing Transactions, Section 56.10 (eff. Jan. 1, 2023).

[241] Basel Committee, Minimum Haircut Floors for Securities Financing Transactions, Section 56.12 (eff. Jan. 1, 2023).

current models-based Subpart E of the capital rules for purposes of calculating its gross credit exposure in respect of a securities financing transaction or derivative transactions under the SCCL.[242] Under the Proposal, a banking organization would be required to calculate its gross credit exposure for securities financing transactions and derivative transactions for purposes of the SCCL using only the methods provided under ERBA in new Subpart E to the capital rules.[243]

As discussed above, the Associations recommend that the Agencies not implement the proposed minimum haircut floors. If, however, the Agencies do so, the Associations recommend that the Federal Reserve revise the SCCL rules to expressly provide that securities financing transactions should be valued using the method specified in proposed § _.121(c) (the ERBA collateral haircut approach), without regard to proposed § _. 121(d) (the minimum haircut floors). This revision would make clear that the proposed minimum haircut floors would not apply to the valuation of a securities financing transaction for SCCL purposes, which would make the interrelationship between the capital rules and SCCL rules clearer and avoid potential unintended and inappropriate changes to the SCCL.

It would not be appropriate to apply the minimum haircut floors to exposure calculations for purposes of the SCCL. The SCCL framework already provides the methodology that a subject banking organization must use to calculate its gross credit exposure to a counterparty with respect to a securities financing transaction. Moreover, the policy purpose of the SCCL rules is separate and distinct from the stated supervisory objective underlying the proposed minimum haircut floors. The SCCL rules are intended to "limit the risks that the failure of any individual firm could pose to [large U.S. and foreign banking holding companies and nonbank financial companies]."[244] In contrast, the proposed minimum haircuts are "intended to limit the build-up of excessive leverage outside the banking system and reduce the cyclicality of such leverage, thereby limiting risk to the lending banking organization and the banking system."[245]

Under the methodology set forth in the SCCL framework, a banking organization is required to include the value of securities that are "eligible collateral" received from the counterparty for purposes of determining the banking organization's gross credit exposure to a counterparty in respect of a securities financing transaction.[246] In this regard, the definition of "eligible collateral" for purposes of the SCCL framework[247] is not consistent with the definition of "financial collateral" under the current U.S. capital rules.[248] Introducing minimum haircut floors into the SCCL framework would potentially result in significant exposure volatility due to the

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242 12 C.F.R. § 252.73(a)(4), § 252.73(a)(7); 12 C.F.R. § 252.173(a)(4), § 252.173(a)(7).

243 88 Fed. Reg. at 64,028, 64,031, 64,326 and 64,327.

244 Federal Reserve, Single-Counterparty Credit Limits for Bank Holding Companies and Foreign Banking Organizations, 83 Fed. Reg. 38,460, 38,460-61 (Aug. 6, 2018).

245 88 Fed. Reg. at 64,063.

246 12 C.F.R. § 252.73(a)(4), § 252.173(a)(4).

247 12 C.F.R. § 252.71(k), § 252.171(k).

248 83 Fed. Reg. at 38,469 (Aug. 6, 2018) ("In response to comments, the Board has added gold bullion to the list of eligible collateral. The Board has declined to add certain other types of collateral such as mortgage-backed securities (MBS) and shares in money market mutual funds (MMMF) as requested by commenters even though these collateral types are recognized as eligible collateral in the Board's capital rules.").

"cliff effects" of the minimum haircut floors, which would significantly impair the ability of banking organizations to manage SCCL exposures. Applying the minimum haircut floors in the SCCL context would also not further the stated policy objective of the SCCL rules, as the minimum haircut floors would, when the floors are not met, require a banking organization to disregard collateral that is actually provided and that does actually reduce the banking organization's risk.

In addition, the Associations recommend that the Federal Reserve revise the definition of "adjusted market value" in the SCCL rules to permit a banking organization to multiply the applicable collateral haircuts by √2 for client-facing derivatives transactions (as defined in the current U.S. capital rules), in addition to repo-style transactions.[249] This revision would align with the current U.S. capital rules and the Proposal, each of which apply the scaling factor of √2 for both client-facing derivatives transactions and repo-style transactions.

V Recommendations Regarding Other Elements of the Proposed Collateral Haircut Approach and Treatment of SFTs

A. The "publicly traded" requirement for corporate debt would significantly limit the scope of eligible collateral and should be removed.

Under the Proposal, the issuer of a corporate debt security (or its parent) would be required to have publicly traded securities outstanding in order to qualify as financial collateral for purposes of calculating risk-weighted assets for SFTs under ERBA.[250] This proposed modification to the scope of financial collateral under ERBA would also affect the calculation of exposure amounts with respect to derivative contracts for purposes of SA-CCR.

This additional requirement for a corporate debt security to be considered financial collateral should be removed. The extent to which an issuer of debt securities (or its parent) has publicly traded securities outstanding is not relevant to the liquidity of the corporate debt security and the value of the debt security in a close-out scenario. In general, debt securities are not publicly traded but instead trade over-the-counter ("**OTC**") on trading platforms. Implementing a publicly trading security requirement would result in a requirement that the issuer of a corporate debt security (or its parent) having publicly traded securities outstanding in order for the debt security to be considered financial collateral. There is not a principled basis for linking the eligibility of debt securities as financial collateral to whether the issuer (or its parent) has publicly traded securities. This requirement could limit liquidity in the repo market for debt securities where neither the issuer nor its parent has publicly traded securities outstanding. This new requirement could also have adverse effects on cleared derivatives markets given that DCOs registered with the CFTC may accept corporate bonds to satisfy initial margin requirements.[251]

Further, the current U.S. capital rules already require a banking organization to assess whether a debt security is sufficiently liquid to be recognized as financial collateral. In particular, the

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[249] 12 C.F.R. § 252.71(a), § 252.171(a).

[250] § _.121(a)(3). The proposed requirement for a company to be publicly traded to qualify for a lower risk weight under ERBA also raises issues, which are beyond the scope of this letter.

[251] 17 C.F.R. § 39.13(g)(10).

product definitions of "eligible margin loan" and "repo-style transaction" in Section 2 of the current U.S. capital rules address the liquidity of securities collateral by requiring that the securities be liquid and readily marketable, which would remain the same under the Proposal. In addition, a banking organization must adjust haircuts upward if a netting set contains one or more trades involving illiquid collateral. The definition of "financial collateral" under the current U.S. capital rules also already requires that a debt security be investment grade, which addresses the quality of the collateral. The extent to which an issuer (or its parent) has publicly traded equity securities does not relate to the quality of the issuer's debt securities and their value in a close-out scenario.

The Associations recommend removing the publicly traded security requirement from the criteria to qualify as financial collateral, consistent with authority for national banks to purchase and hold investment securities. Specifically, under OCC regulations and subject to specified limitations, bank-eligible investments include a corporate bond that is a marketable debt obligation that is investment grade and not predominately speculative in nature.[252] OCC regulations do not include a publicly traded security requirement and therefore expressly permit a national bank to purchase and hold corporate debt obligations issued by a company that does not have its own listing or a parent with a securities listing. It would be inconsistent not to recognize as financial collateral securities used to reduce exposures on a close-out basis when the securities would be permissible for a national bank to purchase and hold. Furthermore, for purposes of the SCCL, securities are not required to be issued by a company with a publicly traded security (or a parent with a publicly traded security) in order to be considered eligible collateral.

B. The scope of the calculation of the exposure amount of a netting set under the collateral haircut approach should be clear that eligible margin loans are included.

Under the Proposal, a banking organization would apply a new formula in § _.121(c)(2)(i) to determine the exposure amount for eligible margin loans and repo-style transactions covered by a qualifying master netting agreement that includes a baseline exposure component, a market volatility component and an idiosyncratic risk component.[253] A banking organization would use this formula to determine the exposure amount for a "netting set of eligible margin loans or repo-style transactions."[254] The proposed formula generally would take into account the number of instruments in the netting set with a unique CUSIP designation (or foreign equivalent).[255] Specifically, parameter "N" would be defined as

> the number of instruments with a unique Committee on Uniform Securities Identification Procedures (CUSIP) designation or foreign equivalent that the banking organization, sells subject to repurchase, posts as collateral, borrows, purchases subject to resale, or takes as

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252 In particular, the definition of "Type III security" under Part 1 of the OCC's regulations includes corporate bonds that are not Type I securities or Type II securities. 12 C.F.R. § 1.2(*l*).

253 § _.121(c)(2)(i).

254 § _.121(c)(2)(i).

255 § _.121(c)(2)(i)(H).

> collateral in the netting set, including all collateral that banking organization elects to include within the credit risk mitigation framework, except that instruments where the value E_s is less than one tenth of the value of the largest E_s in the netting set are not included in the count or gold, with any amount of gold given a value of one.[256]

With respect to an "individual eligible margin loan," the Proposal would require using a different exposure calculation for "single transactions under § _.121(c)(2)(ii), which would not take into account the diversification benefits of different collateral. The Associations are concerned that limiting the application of the proposed formula to a "netting set" may be interpreted to disqualify margin loans more generally. In particular, under U.S. GAAP, margin loan transactions between a banking organization and its customer in which the banking organization receives from its customer different types of securities collateralizing multiple extensions of credit extended under a single agreement are treated as a single unit of account, i.e., a single transaction. In other words, as an accounting matter, a banking organization would treat multiple margin loan transactions as a single eligible margin loan. Additionally, some securities lending or securities borrowing transactions may involve baskets of securities.

Furthermore, the presence of multiple types of securities that collateralize either a number of margin loans recognized under U.S. GAAP as a single transaction or a repo-style transaction based on a basket of securities provides the same diversification benefits as would apply with respect to a netting set of eligible margin loans or repo-style transactions. Additionally, for these transactions, the correlation behavior of the securities on the exposure side and the collateral side of the transaction would be the same as if there were several transactions involving the same securities.

The proposed formula for single transactions under § _.121(c)(2)(ii) that would apply to calculate the exposure amount for an individual eligible margin loan or repo-style transaction that is not a part of a netting set would not adequately address these fact patterns because it does not prescribe how a banking organization would aggregate multiple different types of collateral a banking organization receives, and also would not capture the diversification and netting dynamics of multiple securities. Accordingly, a banking organization should use the proposed formula for netting sets with respect to a single eligible margin loan or repo-style transaction if the transaction involves multiple securities. For these purposes, the rules text in § _.121(c)(2)(i) should be revised such that the banking organization would use the netting set formula either for a netting set of eligible margin loans or repo-style transactions or an eligible margin loan or repo-style transaction that involves multiple securities. Relatedly, the rules text in § _.121(c)(2)(ii) should be revised to specifically exclude from the single transaction formula an eligible margin loan or repo-style transaction that involves multiple securities.

In general, the Associations support using the number of instruments with a unique CUSIP designation (or foreign equivalent) in the proposed formula, rather than determining the number

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[256] Under the Proposal, E_s would be defined as "the absolute value of the net position in a given instrument or in gold, where the net position in a given instrument or gold equals the sum of the current fair values of the instrument or gold the banking organization has lent, sold subject to repurchase, or posted as collateral to the counterparty, minus the sum of the current fair values of that same instrument or gold the banking organization has borrowed, purchased subject to resale, or taken as collateral from the counterparty." § _.121(c)(2)(i)(F).

of instruments on the basis of the number of issuers. The preamble to the Proposal provides that this element of the formula "would capture the impact of portfolio diversification" on the basis that "the contribution from the gross exposure component to the exposure amount would decrease proportionally with an increase in the number of unique instruments by CUSIP designations or foreign equivalent."[257] The Associations agree that using the number of instruments with a unique CUSIP designation or foreign equivalent would be an appropriate metric for recognizing the effects of portfolio diversification.

C. Market price volatility haircuts for GSE debt should be reduced, and other aspects of the market price volatility haircuts should be revised.

The Proposal would revise the existing market price volatility haircuts in a manner that generally would increase the market volatility haircuts and reduce the recognition of the risk mitigating effects of financial collateral, in part with respect to GSE securities, for which the volatility haircuts may face an increase of up to four times the current treatment. In particular, Table 1 to § _.121 assigns generally lower haircuts to a sovereign or an issuer described in § _.111(b) (generally, MDBs and supranationals), in comparison to corporates.

GSE debt (e.g., Fannie Mae and Freddie Mac mortgage-backed securities and debt securities) should receive the market price volatility haircuts applicable to securities issued by a sovereign or an issuer described in § _.111(b) of the Proposal (namely, the enumerated supranational entities and MDBs), rather than the haircuts that would generally apply to corporate debt securities, in light of their higher credit quality and the liquidity characteristics of their securities. Under this approach, the haircut would not be the same as the haircut applicable to U.S. Treasuries given that the risk weight applicable to GSE debt is 20 percent. Accordingly, the proposed haircut for GSE debt would be 1 percent for residual maturity of less than one year, 3 percent for a residual maturity of more than one year and less than five years and 6 percent for a residual maturity of more than five years. This approach would be similar to other aspects of the current U.S. regulatory capital framework that provide separate treatment to exposures to GSE debt in comparison to other general debt securities, including the lower risk weights that apply to GSE exposures under current Subpart D of the capital rules, the prescribed specific risk-weighting factor assigned to GSE debt positions under current Subpart F and the separate default risk weights that would apply to GSE debt positions under the proposed DRC framework. This approach would also be consistent with the LCR framework, which assigns lower haircuts to GSE debt securities than corporate or municipal debt securities.[258]

Consistent with the risk of GSE debt as reflected in the risk weights applied to these exposures, the reference in Table 1 to Section 121 should be expanded to say "securities issued by a

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257 88 Fed. Reg. at 64,061.

258 A security issued by (or guaranteed as to the timely payment of principal or interest by) a U.S. GSE that is investment grade generally is treated as a level 2A liquid asset under the LCR. In contrast, an investment grade corporate debt security is treated as a level 2B liquid asset. Under the LCR, a 15 percent haircut is applied to level 2A liquid assets and a 50 percent haircut is applied to level 2B liquid assets. In addition, under the Federal Reserve's CCAR framework, U.S. agency or MBS issued by a GSE are assumed not to be subject to credit losses. Federal Reserve, *2023 Stress Test Methodology*, p. 54 (June 2023), *available at* https://www.federalreserve.gov/publications/files/2023-june-supervisory-stress-test-methodology.pdf.

sovereign or an issuer described § _.111(b) and § _.111(c)." This would result in an appropriate calibration of haircuts applied to this collateral and would keep collateral haircuts generally in line with current haircuts.

Separately, for PSE securities, the preamble to the Proposal provides that the market price volatilities applicable to securities issued by a sovereign would also be applicable to securities issued by PSEs that are treated as sovereigns by the national supervisors.[259] The Associations recommend that, for clarity, that same footnote be included with respect to Table 1 to § _.121 in the rule text.

With respect to exchange-traded funds ("**ETFs**"), a banking organization should be permitted to assign a market price volatility haircut either by looking through the ETF to its underlying constituents or, alternatively, treating the undecomposed ETF as a publicly traded equity security. This approach would be broadly consistent with the proposed treatment for mutual funds, for which the Proposal would assign the highest haircut applicable to any security in which the fund can invest unless the banking organization can apply the full look-through approach for equity investment in funds, in which case the banking organization would use a weighted average of haircuts applicable to the securities.

With respect to senior securitization exposures, the rules text should specify that residual maturity is based on the weighted residual maturity of the exposure.

D. The rules text should clarify the scope of exclusions from adjusting haircuts upward with respect to cleared transactions.

Under the Proposal, a banking organization must adjust the haircuts upward on the basis of a holding period longer than ten business days for eligible margin loans or five business days for repo-style transactions that are not cleared transactions in specified conditions, including when the number of trades in a netting set exceeds 5,000 or the netting set contains one or more trades involving illiquid collateral.[260] Section 37(c)(3)(iv) (standardized approach) and Section 132(b)(2)(ii)(A)(4) and 132(b)(2)(ii)(A)(5)(i) (advanced approaches) of the current capital rules, in contrast, applies an exclusion from applying the upward haircut adjustments in respect of cleared transactions only under the condition in which the trades in a netting set exceed 5,000.

The Proposal appears to reflect a broadening of the exclusion applicable to cleared transactions. The Associations seek clarification that the Agencies intended to broaden this exclusion.

E. Collateral in a securities borrowing transaction that is pledged in a "bankruptcy remote" manner should not be subject to regulatory capital requirements.

The Associations acknowledge that the current U.S. capital rules have been amended to permit a banking organization to exclude collateral posted that is bankruptcy remote from certain exposure at default calculations. First, this has been done in relation to cleared transactions

[259] 88 Fed. Reg. at 64,062, fn. 118.

[260] § _.121(c)(2)(iii)(D).

where bankruptcy remote collateral would not need to be considered an exposure. This was expanded as part of the implementation of SA-CCR to apply to all derivative transactions, i.e., cleared and uncleared. In particular, the net independent collateral amount definition under Section 2 of the current U.S. capital rules requires banking organizations to exclude posted collateral that is held in a bankruptcy remote manner. However, the Associations note that this treatment has not been applied consistently in the calculation of exposure amounts for repo-style transactions even though there are arrangements where the posted collateral is bankruptcy remote.

In particular, advancements in the securities borrowing and lending market have resulted in the development of third-party structures with respect to pledging collateral (the "**Third-Party Securities Borrowing Model**"). Under the Third-Party Securities Borrowing Model documented under a Master Securities Lending Agreement or Global Master Securities Lending Agreement, securities borrowers pledge collateral into segregated collateral accounts at a third-party collateral agent (referred to as the "**Custodian**"), in an account in the name of the borrower and with a security interest in favor of the securities lender. Under this construct, the securities lender does not have the right or ability to rehypothecate or reuse the collateral. In addition, the Custodian holds the assets separately from its own assets.

The purpose of this construct is to reduce the security borrower's credit risk to the lender by placing the securities collateral in a manner that is bankruptcy remote from the securities lender. The collateral remains the property of the borrower and the lender obtains a security interest, which is enforceable only if the borrower defaults. The lender has no legal access to the collateral other than in the event of default of the borrower and the collateral will not form part of the bankruptcy proceedings of the lender in the case of its default. Under this pledge structure, the lender, as the secured party, would be required to follow an enforcement process to access and liquidate the collateral. By contrast, under a title transfer structure, a lender would own and could immediately realize the proceeds of the collateral upon occurrence of an event of default without taking any further steps to obtain control of the collateral.

From a legal perspective, the Third-Party Securities Borrowing Model is similar to how non-cash initial margin is pledged for purposes of the margin requirements for uncleared swaps. As a result, the securities borrower, as an economic matter, should not be required to treat the collateral pledged to a third-party custodial account that is bankruptcy remote as an exposure for regulatory capital purposes. As noted above, this treatment would be consistent with revisions to other sections of the current U.S. capital rules.

F. The Agencies should implement a lower risk weight for short-term exposures to banking organizations consistent with the Basel framework.

The Proposal would not include a lower risk weight for certain short-term exposures to banking organizations (such as SFTs) as provided under the Basel framework.

There should be a lower risk weight applicable for short-term exposures to banking organizations. Differentiating by maturity risk is consistent with the regulatory intent of the Proposal. In particular, the preamble to the Proposal provides that ERBA is intended to be "more risk-sensitive than the current U.S. standardized approach by incorporating more credit-

risk drivers (for example, borrower and loan characteristics) and explicitly differentiating between more types of risk (for example, operational risk, credit valuation adjustment risk)."[261]

G. Exposures to a securities firm or other financial institution subject to bank prudential standards should be treated as a bank exposure consistent with the Basel framework.

Under the Basel framework, an exposure to a securities firm or other financial institution may be treated as an exposure to the bank if the securities firm or other financial institution is subject to Basel prudential standards and supervision equivalent to the standards applicable to banks.[262] The Proposal did not include this aspect of the Basel framework.

The rules text should incorporate a framework pursuant to which an exposure to a broker-dealer, swap dealer or foreign equivalent directly subject to Basel-based bank capital requirements would be treated as a bank exposures qualifying for the lower risk weights applicable to banks. For example, investment firms in the EU or UK that are subject to EU or UK bank capital and liquidity requirements should be treated as bank exposures. Under the applicable regulatory framework in these jurisdictions, investment firms are subject to the Basel framework and, as a result, should be considered to have less credit risk than general corporate exposures.

Similarly, non-bank swap dealers that have elected to apply the bank-based approach for capital requirements based on the Federal Reserve's regulatory capital rules similarly should be treated as exposures to banks. These swap dealers should be considered to be subject to comprehensive supervision and prudential standards in the form of capital requirements based on the Federal Reserve's regulatory capital rules, as well as the regulation and supervision of the CFTC and the National Futures Association.

Additionally, exposures to broker-dealers that are subsidiaries of bank holding companies—and therefore indirectly subject to bank supervision and prudential requirements equivalent to that of a bank—also should be treated as bank exposures. The Agencies have previously recognized that these broker-dealers "generally pose relatively low credit risk," such that claims on U.S. broker-dealers should receive a reduced risk weight (from 100 percent to 20 percent).[263] Furthermore, U.S. bank holding companies generally must comply with the capital and liquidity requirements that apply to banks. In certain respects, U.S. bank holding companies are subject to more stringent requirements, including liquidity stress testing and liquidity buffer requirements under Regulation YY and the SCB. For these reasons, exposures to U.S. bank holding companies should receive the same risk weights applicable to banks.

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261 88 Fed. Reg. at 64,030.

262 Basel framework, 20.16.

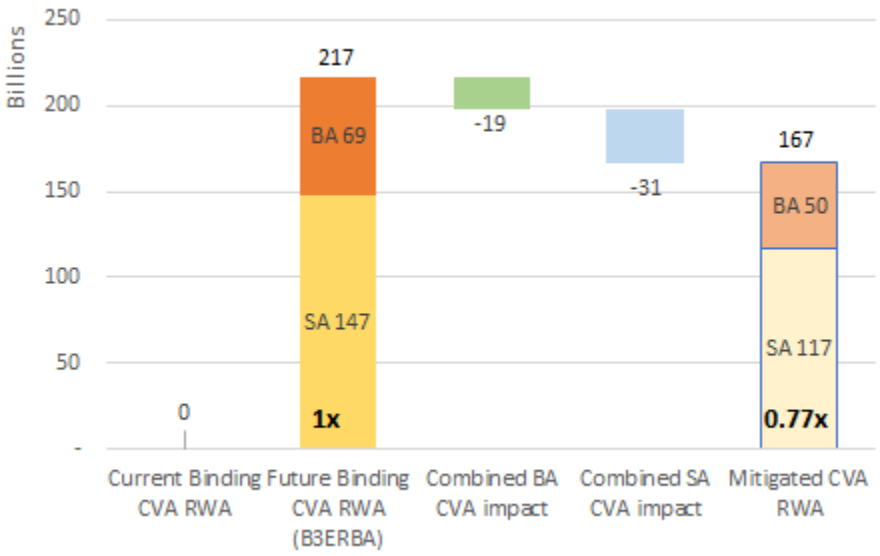
263 FDIC, Federal Reserve, OCC, Office of Thrift Supervision, *Risk-Based Capital Standards: Claims on Securities Firms*, 67 Fed. Reg. 16,971 (Apr. 9, 2002).

VI Recommendations Regarding the Proposed CVA Risk Framework

Industry QIS Results

Under the current U.S. capital rules, the U.S. standardized approach generally is the binding capital constraint for large banking organizations. The standardized approach includes capital requirements only for market risk and credit risk. As a result, CVA RWA is zero in the current standardized approach. The Proposal's ERBA includes capital requirements for CVA risk and operational risk, in addition to market risk and credit risk. ERBA generally is expected to be the binding capital constraint for large banking organizations going forward. The QIS results show a total of $217 billion[264] under ERBA, including both BA-CVA and SA-CVA. If the Agencies were to implement the below mitigation items, the combined impact would reduce the total CVA RWA to 0.77[265] times the proposed total CVA RWA.

Figure 6: QIS CVA RWA Impact



Impact of CVA Quantified Mitigation Items:

If the Agencies were to implement the below mitigation items, the combined impact would reduce ERBA CVA RWA by 23 percent[266]or $50 billion[267].

- **Increasing granularity of financials risk bucket:** 19 percent[268] reduction.

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264 See Appendix 8 – Quantitative Impact Study Results, Index TB_58.

265 See Appendix 8 – Quantitative Impact Study Results, Index TB_59.

266 See Appendix 8 – Quantitative Impact Study Results, Index TB_60.

267 See Appendix 8 – Quantitative Impact Study Results, Index TB_61.

268 See Appendix 8 – Quantitative Impact Study Results, Index TB_62.

- **Excluding client cleared leg of cleared transactions:** 9 percent[269] reduction.
- **Increasing cross-bucket correlation of 70 percent between bucket 8 and buckets 1-6 in SA- CVA:** 8 percent[270] reduction.[271]

Although the Associations were not able to quantify fully all effects of our recommended changes to the Proposal, further revisions are needed more broadly as outlined in this letter to avoid negative implications for the U.S. capital markets and resulting effects on CEUs, other businesses and consumers.

A. CVA capital requirements would not be appropriately calibrated to CVA gains and losses.

The Associations remain concerned about the effect of the proposed requirements for CVA risk capital. Two of the objectives of the proposed CVA revisions were to ensure (i) better alignment with accounting standards and (ii) better recognition of CVA hedges.[272] However, the Associations do not believe that this has been achieved, as the proposed CVA requirement remains disconnected from actual unrealized gains and losses as a result of credit valuation changes. To illustrate this point it is helpful to compare CVA gains and losses to the current CVA requirement applicable under the advanced approaches.

First, the analysis uses current CVA requirements under the advanced approaches as a proxy for future capital requirements. This is appropriate as the Proposal would result in a CVA requirement that is generally only 13[273] percent lower than the current CVA requirement. Further, this projected impact may be an overstatement given that it assumes that banking organizations obtain approval to use the more risk-sensitive SA-CVA instead of BA-CVA.

This analysis includes four U.S. GSIBs that have reported CVA gains and losses since at least the first quarter 2019.[274] The analysis compares the CVA capital requirement with the CVA gain or loss reported the following quarter. A comparison of the CVA requirement with a quarterly CVA gain or loss is aligned with the liquidity horizon specified under FRTB-IMA where corporate investment grade credit spreads are assigned a liquidity horizon of 40 business days and high yield exposures are assigned a liquidity horizon of 60 business days.

For all four banking organizations, the analysis includes a quarter of severe stress, in particular the COVID-19 period in the first half of 2020. For three of the banking organizations, the analysis goes back to Q1 2013 and for one bank to Q1 2019.[275] In instances where the CVA

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269 See Appendix 8 – Quantitative Impact Study Results, Index TB_63.

270 See Appendix 8 – Quantitative Impact Study Results, Index TB_64.

271 The reductions for the quantified mitigation items represent the standalone impact of each of the mitigation items, such that the overall reduction in CVA RWA is lower than a simple sum of the mitigation items.

272 Basel Committee, *Review of the Credit Valuation Adjustment Framework* (July 2015), *available at* https://www.bis.org/bcbs/publ/d325.pdf.

273 See Appendix 8 – Quantitative Impact Study Results, Index TB_65.

274 The four banks are Bank of America, Citigroup, Goldman Sachs and J.P. Morgan.

275 A longer time horizon was not used given that the CVA capital charge was only available since Q2 2014.

capital requirement was not available, this analysis uses an average from the quarters when it was available when comparing the CVA gain or loss on the balance sheet to the CVA requirement. For two of the banking organizations the quarterly CVA gains and losses were reported net of hedges while for the other two these amounts were reported gross of hedges. Given that the CVA capital charge reflects the effect of hedges, the use of CVA gains or losses gross of hedges in this analysis is conservative.

The analysis reveals the significant overcalibration of the proposed CVA capital requirement. Even including the COVID-19 period, the CVA capital requirement from a RWA perspective was more than 3.7 times the maximum quarterly loss since Q1 2013 for the two banking organizations that reported CVA gross of hedges. For the other two banking organizations that reported gains and losses net of hedges, the CVA capital requirement from a RWA perspective was more than 10 times the maximum quarter loss since Q1 2013 for one banking organization and Q1 2019 for the other banking organization. Moreover, the CVARWA overcalibration is even more pronounced than the 3.7 figure noted above—which relates only to RWAs, and therefore the denominator of regulatory capital calculations—because the SCB also includes CVA losses, which affects the numerator.

Even the cumulative losses since 2013 for three banking organizations (more than 10 years of data) and 2019 for one banking organization were less than the CVA requirement. For the two banking organizations that reported CVA loss gross of hedges, the CVA charge was on average 45 percent higher than the cumulative quarterly losses since 2013. For the two banking organizations that reported losses net of hedges, the CVA charge was 145 percent higher than the cumulative losses since 2013 for one banking organization and 2019 for the other banking organization. Although the numbers demonstrate an overcalibration, we highlight that the reported CVA losses do not exclude instances in which the deterioration in the credit quality of the counterparty ultimately ended up in an actual default. These instances should be capitalized through the counterparty credit default charge. Also including these losses in the CVA charge would constitute double counting. In these cases, the losses would overestimate the CVA risk that should be capitalized through the CVA charge.

Accordingly, these results demonstrate the need for a more appropriate calibration of the CVA capital requirement. While the impact of our recommendations varies, each recommendation would help to close the gap between the size of the CVA requirement and the risk the banking organization faces from CVA losses. In this context, the Associations highlight that the CVA framework has, unfortunately, not taken into account developments in the derivatives market that have reduced counterparty credit risk, in particular margin requirements for uncleared swaps. The standardization regarding collateralization of counterparty credit risk across the industry has led to revisions in the calculation of CVA for financial reporting purposes, particularly with respect to MPOR assumptions.

The Associations acknowledge that the overcalibration of the CVA capital requirement is not new and is currently reflected in the advanced approaches. However, the standardized approach currently is the binding constraint for most large banking organizations, which does not include CVA. Furthermore, as discussed above, CVA losses are separately capitalized under the Federal Reserve's supervisory stress test and, in turn, the SCB requirement, which would exacerbate the overcalibration of CVA capital requirements. This overcalibration would have a direct effect on

banking organizations to provide end users with appropriate hedges to manage the risks arising from their commercial activities.

B. CVA risk capital requirements should not apply to exposures to clients on cleared trades.

Under the Proposal, a CVA risk covered position would not include cleared transactions or SFTs. The rationale provided in the Proposal is that "[a] banking organization generally does not calculate CVA for cleared transactions or for securities financing transactions (SFTs) for financial reporting purposes."[276] The Associations support these exclusions and the associated rationale, which would result in greater alignment between regulatory capital and actual CVA risk exposure. However, the same rationale for excluding cleared transactions and SFTs from CVA risk also applies to the client-facing leg of a trade cleared through a CCP where the banking organization is acting as the clearing member.[277]

In particular, a banking organization does not have actual CVA risk exposure when it acts as clearing member on behalf of a client on a cleared trade. Similarly, these exposures are not subject to CVA under U.S. GAAP. Because there is no CVA with respect to these positions under GAAP, there should be no CVA risk to capitalize under the regulatory capital rules, consistent with the discussion in the preamble highlighted above.[278] In addition, with respect to a client-facing exposure on a cleared trade, a banking organization is at risk to incur a loss only if its client defaults on its obligations and there was a shortfall that would not be covered by the client's collateral. That risk is similar to an SFT, in which a banking organization would suffer a loss only if the counterparty defaulted and the available collateral was not sufficient to offset the exposure. That default risk is already subject to regulatory capital through counterparty credit risk capital requirements (specifically, under the Proposal, SA-CCR). More broadly, including the client-facing leg of a cleared trade within CVA risk capital requirements would increase the costs of clearing contrary to public policy objectives.

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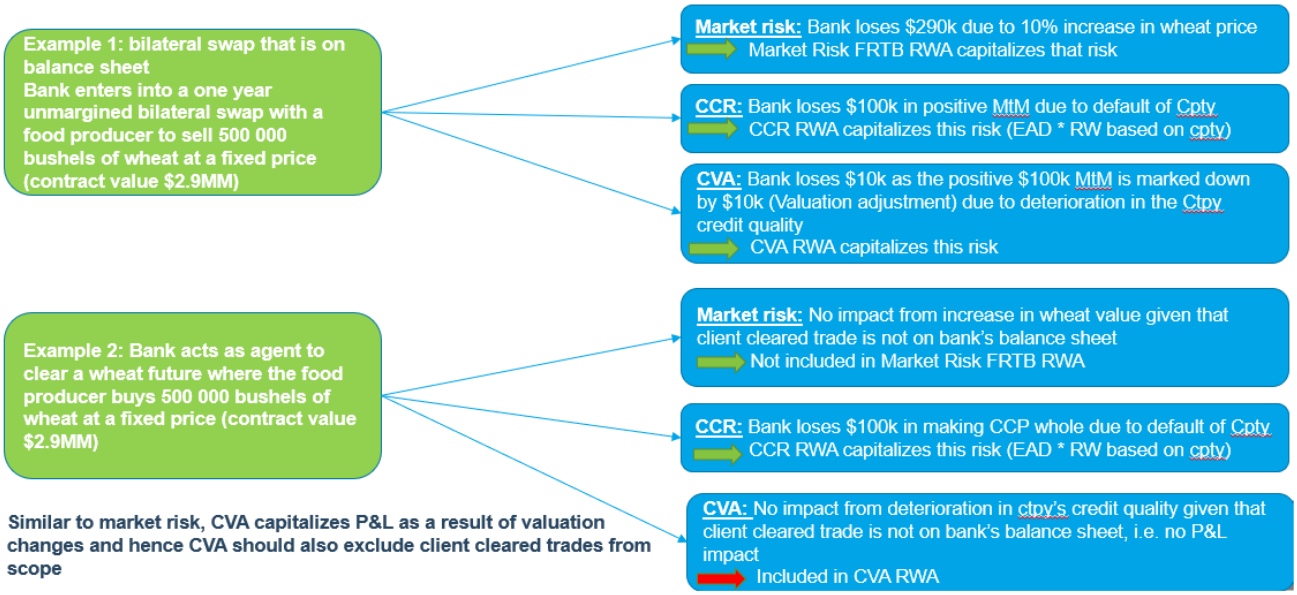
276 88 Fed. Reg. at 64,151.

277 § _.202(b).

278 "A banking organization generally does not calculate CVA for cleared transactions or for securities financing transactions (SFTs) for financial reporting purposes. Consistent with this industry practice, the proposal would not consider a cleared transaction or an SFT to be a CVA risk covered position and therefore would not extend the CVA risk-based capital requirements to such positions." 88 Fed. Reg. at 64,151.

Figure 7: Bilateral versus Cleared Derivatives - How Risks are Capitalized



To the extent there is any concern regarding CVA risk when cleared positions are ported between clearing members, there is in fact no profit and loss impact for a clearing member when a client is ported to another clearing member, irrespective of whether the porting was the result of a clearing member default. The client's positions do not belong to the clearing member[279] and with the lack of economic interest in the client's positions, the clearing member is not exposed to mark-to-market changes in respect of a client's portfolio, including when a portfolio is ported to another clearing member. Accordingly, the clearing member does not assign a fair value to these positions that is capable of adjustment based on the client's creditworthiness. If a client defaults and is closed out, the clearing member can suffer losses[280] if the client's liabilities under its transactions—which the clearing member effectively guarantees—are greater than the margin the clearing member has received from the client. However, this is not a profit and loss event through a mark-to-market loss associated with derivative exposures that the CVA requirement is capitalizing. Instead, this is a default risk that the counterparty credit risk default requirement covers, to which all client-cleared exposures are already subject.

In addition, the approach of applying CVA risk capital requirements to exposures to clients on cleared trades would raise related issues regarding using the SA-CVA. Given that these

[279] Under U.S. GAAP, the clearing member is treated as an agent irrespective of whether it is clearing using the agency model or the principal model and, accordingly, does not record transactions it clears for clients on its balance sheet. This agency characterization is supported by, among other things, the fact that the clearing member does not take market risk with respect to its clients' transactions. Client-clearing services represent a form of credit intermediation in which the clearing member takes credit risk in respect of its clients and is compensated for providing these services through payment of fees and commissions. In contrast, a swap dealer faces its clients as a principal rather than an agent, takes market risk with respect to the swaps it enters into with them and is compensated through swap spreads.

[280] The clearing member does not recognize as its own a net profit from liquidating a defaulting client's transactions.

exposures do not generate any CVA risk for a banking organization acting as a clearing member and are not reflected on its balance sheet, a banking organization would not include client-facing derivative transactions within CVA risk and therefore a banking organization will not generate accounting CVA sensitivities for business-as-usual purposes. Thus, a banking organization would need to, at a minimum, allocate resources to perform validation of regulatory CVA sensitivities if it seeks to adopt SA-CVA with respect to client-facing derivatives. If the banking organization does not currently have models to generate exposure profiles for client-facing derivatives, in particular for listed options and futures, given that these products are not in scope for CVA for financial reporting purposes, these models would need to be developed from scratch, which would increase costs further. This could effectively require a banking organization to apply the BA-CVA, which would only serve to amplify the significant overstatement of CVA risk capital requirements arising from including these positions in CVA RWAs. This approach would raise the costs of central clearing and would place further pressure on the involvement of banking organization as futures commission merchants ("**FCM**") in the cleared markets, as described further in Section I.E.VIII.

While we understand that the Agencies have previously considered this issue, changes in circumstances warrant a re-evaluation of the issue in connection with the Proposal for several reasons:

- ***First,*** the CVA framework currently applies under only the advanced approaches—which generally is ***not*** the binding constraint for large banking organizations—but the Proposal would include CVA in ERBA, which likely ***will*** become the binding constraint for most large banking organizations.
- ***Second,*** other jurisdictions, most notably the EU[281] and the UK,[282] have excluded or proposed to exclude the client-facing leg of cleared derivative transactions from CVA risk capital requirements. The Agencies should align with the approach taken by other supervisors to create competitive equity and a harmonized approach.
- ***Finally,*** the continued inclusion of client-cleared transactions in the CVA framework would have a significant negative aggregate impact on client clearing when viewed together with other features of the Proposal and the separate Federal Reserve proposal regarding the GSIB Surcharge,[283] including proposed revisions to the Complexity and

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281 See EU Capital Requirements Regulation (CRR), Art. 382(3), *available at* https://www.eba.europa.eu/regulation-and-policy/single-rulebook/interactive-single-rulebook/1568 ("Transactions with a qualifying central counterparty and a client's transactions with a clearing member, when the clearing member is acting as an intermediary between the client and a qualifying central counterparty and the transactions give rise to a trade exposure of the clearing member to the qualifying central counterparty, are excluded from the own funds requirements for CVA risk"); European Banking Authority Q&A No. 2016_3009 (Jan. 20, 2017), *available at* https://www.eba.europa.eu/single-rule-book-qa/-/qna/view/publicId/2016_3009 (clarifying that "centrally cleared clients' trades should be exempted from both the perspective of the clearing member and the client"). Notably, European capital requirements also exempt most trades with non-financial counterparties such as corporates and pension funds.

282 Bank of England, *CP16/22 – Implementation of the Basel 3.1 standards: Credit valuation adjustment and counterparty credit risk*, § 7.10 (Nov. 30, 2022), *available at* https://www.bankofengland.co.uk/prudential-regulation/publication/2022/november/implementation-of-the-basel-3-1-standards/credit-valuation-adjustment.

283 Federal Reserve, Regulatory Capital Rule: Risk-Based Capital Surcharges for Global Systemically Important Bank Holding Companies; Systemic Risk Report (FR Y-15), 88 Fed. Reg. 60,385 (Sept. 1, 2023).

Interconnectedness indicators of the GSIB Surcharge to include client-cleared transactions, and aspects of the proposed operational risk charge attributable to clearing. These issues would be compounded by ERBA (which includes CVA risk and operational risk) becoming the likely binding constraint for many large banking organizations. The Agencies should consider this cumulative impact when evaluating the scope of the CVA framework.

If the recommendation to exclude client-cleared transactions from CVA risk capital requirements is accepted, based on the QIS results, total CVA capital requirements would be reduced by 9[284] percent relative to the Proposal.

C. The proposed risk weights and sensitivities for exposures to financials under the CVA risk framework should reflect the differences in risk profile between regulated and unregulated financials.

Under the BA-CVA and SA-CVA frameworks in the Proposal, a banking organization would assign a five percent risk weight to investment grade financials and a 12 percent risk weight to speculative grade and sub-speculative grade financials.[285] Based on the QIS results, reducing the risk weight for regulated financial institutions and highly regulated entities to three percent (for investment grade) and 8.5 percent (for speculative grade and sub-speculative grade) would reduce total BA-CVA capital requirements by 14[286] percent.

In general, the proposed risk weights for financials under the CVA framework are not appropriately risk-sensitive. There should be enhanced granularity of the risk weights applicable to financials in particular to reflect the differences in risk profile between regulated financial institutions, highly regulated entities and unregulated financial institutions. This difference is reflected in other aspects of the Proposal.

Additionally, there is empirical justification for reducing the risk weight for regulated financials and highly regulated entities to three percent based on the methodology used by the Basel Committee in a consultation regarding FRTB, in particular:[287]

- Observing daily five-year credit spreads for three time periods (with a different number of banking organizations due to data limitations):
    - January 2008 – November 2023: eight banking organizations.
    - April 2008 – November 2023: 10 banking organizations.
    - September 2011 – November 2023: 15 banking organizations.

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284 See Appendix 8 – Quantitative Impact Study Results, Index TB_63.

285 Table 1 to § _.222 (BA-CVA), Table 3 to § _.225 (SA-CVA).

286 See Appendix 8 – Quantitative Impact Study Results, Index TB_66.

287 Basel Committee, *Consultative document: Fundamental review of the trading book: A revised market risk framework* (Oct. 2013), *available at* https://www.bis.org/publ/bcbs265.pdf,

- For each time period, producing a time series of 40-day overlapping credit spread moves and computing a 97.5 percent expected shortfall of the moves over a rolling 12-month window; and
- Selecting the worst 12-month 97.5 percent expected shortfall.

Based on this methodology, the average risk weight inferred for these three time periods is 412 basis points, 372 basis points and 214 basis points for the time periods starting in January 2008, April 2008 and September 2011, respectively. Each of these risk weights is lower than the five percent risk weight for investment grade financials provided in the Proposal. Notably, the credit spreads observed starting in September 2011 reflect a significant reduction in the level of credit spreads compared to 2008. This reduced risk reflects the post-crisis changes in the regulatory framework and the introduction of mandatory margining requirements. The positive effects of these changes were observed during the recent COVID-19 crisis, in which credit spreads did not spike to the levels observed in 2008. The supervisory risk weights assigned to regulated financials should be recalibrated to reflect these improvements in derivative markets. This would also address part of the overcalibration of CVA capital requirements in conjunction with CCAR, which is calibrated to the spreads observed in 2008.

Table 8: Observed Credit Spreads by Bank

97.5%	Since Jan 2008	Since Apr 2008	Since Sep 2011	Start	End
BAC	391	391	189	Jan-08	Nov-23
C	305	305	205	Jan-08	Nov-23
GS	378	378	224	Jan-08	Nov-23
HSBC	555	555	261	Jan-08	Nov-23
JPM	180	180	180	Jan-08	Nov-23
MS	969	967	199	Jan-08	Nov-23
RY	313	313	233	Jan-08	Nov-23
WFC	208	208	208	Jan-08	Nov-23
UBS		227	225	Apr-08	Nov-23
BK		191	191	Apr-08	Nov-23
BACR			291	Dec-08	Nov-23
STT			212	Aug-09	Nov-23
USB			187	Dec-09	Nov-23
NAB			157	Jan-10	Nov-23
BNS			215	Mar-10	Nov-23
MQGAU			196	Mar-10	Nov-23
STANLN			275	Mar-10	Nov-23
BMO			210	Aug-10	Nov-23
SUMIBK			197	Sep-10	Nov-23

97.5%	Since Jan 2008	Since Apr 2008	Since Sep 2011	Start	End
TD			217	Sep-11	Nov-23
Average	412	372	214		

Accordingly, exposures to regulated financials (such as banks and broker-dealers) and other highly regulated entities (including open-end mutual funds, private pension funds and investment companies referenced in Question 39 of the Proposal) should receive a risk weight of three percent for investment grade exposures and 8.5 percent for non-investment grade exposures. Exposures to unregulated financials should continue to receive a risk weight of five percent for investment grade exposures and 12 percent for non-investment grade exposures.

Additionally, exposures to a government pension plan that is a "governmental plan" (as defined in 29 U.S.C. § 1002(32)) or a foreign equivalent should be considered to be an exposure to government-backed non-financials that would receive a one percent risk weight if investment grade and four percent for non-investment grade. These types of governmental pension plans would not be within the scope of the definition of "financial institution" under the current U.S. capital rules and generally are liabilities of the respective government given that certain state and local government pension plans offer defined benefit plans.[288]

D. Significant revisions are needed to the framework for CVA hedges.

1. CVA hedges that do not qualify as eligible CVA hedges should not be automatically included in market risk capital requirements consistent with current treatment, and the scope of eligible CVA hedges should be broadened.

The definition of market risk covered position would include the CVA segment of an internal risk transfer that is not an eligible CVA hedge and a CVA hedge with an external party that is not an eligible CVA hedge.[289] An eligible CVA hedge under the Proposal would include a limited suite of instruments for purposes of calculating CVA risk capital requirements under the BA-CVA, in particular only certain index credit default swaps and single-name CDS hedging the counterparty credit spread risk component of CVA.[290] Based on the QIS results, including ineligible CVA hedges in market risk would increase market risk capital requirements by three[291] percent.

In general, it would not be appropriate to include automatically as a market risk covered position a CVA hedge that does not meet the specific requirements to be considered an eligible CVA hedge under the Proposal. These hedging transactions reduce the economic risk of the banking

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288 Matthew Hoops, Paul Smith and Irina Stefanescu, *State and Local Pension Funding in the Enhanced Financial Accounts* (Feb. 5, 2016), *available at* https://www.federalreserve.gov/econresdata/notes/feds-notes/2016/state-and-local-pension-funding-in-the-enhanced-financial-accounts-20160205.html.

289 § _.202(b).

290 § _.202(b).

291 See Appendix 8 – Quantitative Impact Study Results, Index TB_67.

organization and are an element of sound risk management practices. However, the Proposal would in fact add these positions to market risk capital requirements, such that the capital outcome would diverge from the economics of the arrangement and prudent risk management. This approach would result in the regulatory capital framework becoming less relevant as a risk-measurement tool.

The Proposal would also diverge from the framework under the current U.S. capital rules pursuant to which exposures and hedges generally are subject either to market risk or non-market risk capital requirements, which aligns the capital treatment with risk management practices. Instead, under the Proposal, CVA risk managed by a banking organization's CVA desk would be subject to market risk capital requirements if the hedge is not considered an eligible CVA hedge based on the proposed definition. The treatment under the current U.S. capital rules should be retained. Currently, ineligible CVA hedges are not required to be included in the market risk capital calculation if the banking organization manages the hedge in accordance with its hedging policies, except to the extent the hedge constitutes a commodity or foreign exchange position and is therefore included in the market risk capital calculation as such.

Additionally, the limited set of instruments that would be eligible CVA hedges under BA-CVA is unduly restrictive and would not reflect either current risk management practices or techniques with respect to CVA risk as currently applied under the existing regulatory capital rules. The scope of eligible CVA hedges should be broadened to include any hedging instrument referencing the counterparty or other equivalent hedges, such as a short bond, referencing the counterparty, an affiliate of the counterparty or an entity in the same sector or region as the counterparty. In particular, options on index CDS—a common, efficient and liquid CVA hedging instrument used across the banking industry—should be recognized as an eligible hedge for purposes of the BA-CVA. This approach would more appropriately reflect current CVA risk management practices and current CVA risk capital requirements. Specifically, Section 132(e)(3) of the current capital rules permits "any other equivalent hedging instrument that references the counterparty directly" to be recognized as a CVA hedge.

2. The framework for recognizing CVA hedges should be enhanced with respect to PSE and sovereign exposures.

Under the BA-CVA, an eligible CVA hedge of counterparty credit spread risk that is a single-name CDS (or single-name contingent CDS) must (i) reference the counterparty directly, (ii) reference an affiliate[292] of the counterparty or (iii) reference an entity belonging to the same sector and region as the counterparty. Under BA-CVA, the correlation between a single-name hedge and the exposure is 100 percent if the hedge references the counterparty directly, 80 percent if it references an affiliate or 50 percent if it belongs to the same sector and region as the counterparty. Similarly, for intra-bucket aggregation of counterparty credit risk under SA-CVA,

[292] § _.202(b). For these purposes, an "affiliate" is defined in Section 2 of the current U.S. capital rules as a company that controls, is controlled by or is under common control with the company and a "company" is defined as "a corporation, partnership, limited liability company, depository institution, business trust, special purpose entity, association, or similar organization."

the ρ_{kl}(name) parameter would equal 100 percent if the two names are the same, 90 percent if the two names are distinct but are affiliates and 50 percent otherwise.[293]

The Associations are concerned that the definition of "affiliate" is not appropriately suited to sovereign entities or PSEs in particular. For sovereign entities and PSEs, a banking organization should assign a correlation of 80 percent under the BA-CVA, and ρ_{kl}(name) parameter of 90 percent under SA-CVA, if the banking organization hedges a PSE exposure in a particular jurisdiction with an instrument referencing the corresponding sovereign entity. That is because, in these circumstances, there is generally a strong linkage between the credit quality of the sovereign entity and PSEs located in the same jurisdiction. In this context, from an accounting CVA perspective, a banking organization would use the sovereign CDS credit curve and enter into a hedge referencing the sovereign.

Similarly, a correlation of 80 percent should apply under BA-CVA in respect of a hedge that references a sovereign entity with respect to an exposure to an entity that is controlled by a sovereign and a ρ_{kl}(name) parameter of 90 percent under SA-CVA. In that circumstance, the entity should be considered akin to an "affiliate" of the sovereign. Further, if an entity (including a sovereign entity) unconditionally guarantees the performance of a counterparty, a hedge referencing the guarantor entity should be considered to reference the counterparty directly such that the banking organization would apply a correlation of 100 percent in BA-CVA and assign a ρ_{kl}(name) parameter of 100 percent in SA-CVA. This is consistent with how sovereign exposures are defined in the current U.S. capital rules as "an exposure directly and unconditionally backed by the full faith and credit of a sovereign."

In addition, for SA-CVA, the Associations propose that, where a banking organization is mapping the credit spread curve of an illiquid counterparty using the counterparty's liquid peer following the approach prescribed in § _.224(d)(3)(ii) of the Proposal, the banking organization should be permitted to use that same liquid peer as the "entity" for the counterparty for purposes of defining the counterparty credit spread delta risk factors in § _.225(a)(3)(ii) of the Proposal. This approach would be consistent with accounting CVA, for which any variation of reserves will be based on the credit spread moves of the liquid peer, and any credit spread hedges on the liquid peer would get full recognition.

Further, there are instances where a banking organization provides derivative hedges to a special-purpose vehicle ("**SPV**") that in turn issues notes to investors with tailored return profiles (so called "repack structures"). The SPV acquires a bond and the bond is then used as collateral for an SPV note and also provides protection for the banking organization facing the SPV with the derivative hedges. In these instances, the banking organization would consider the risk to the SPV as equivalent to facing the issuer of the bond because the bond is the ultimate source of repayment. In these cases, the banking organization would map the credit curve to the issuer of that bond and also would hedge the CVA risk with instruments referencing the issuer of that bond. Under these circumstances, the banking organization should be permitted to consider the entity underlying the hedge and the counterparty the same and apply a 100 percent correlation factor.

[293] Table 2 to § _.222.

E. Cross-sector index CDS hedges are not effective in the proposed SA-CVA approach.

The proposed SA-CVA framework would not sufficiently recognize the risk mitigation effectiveness of index CDS hedges. Cross-sector index CDS hedges and options on index CDS hedges are common risk management tools for hedging CVA counterparty spread risk. In general, index CDS has greater liquidity and depth of market than single-name CDS and, as a result, banking organizations use a range of index CDS to hedge CVA risk. This risk management practice would be insufficiently recognized in the proposed SA-CVA in light of the relatively low qualified index cross-bucket correlation treatment.

For the purposes of calculating counterparty credit spread risk under SA-CVA, a banking organization would apply a 45 percent cross-bucket correlation between the qualified index bucket and the buckets other than the "Other sector" bucket, in accordance with Table 4 to § _.225. Although the Associations appreciate the introduction of index buckets as part of the 2019 Basel Committee CVA consultation (finalized in 2020),[294] index buckets alone would not be sufficient to recognize index hedges appropriately within SA-CVA, as outlined in an industry response to the consultation.[295] Specifically, using the cross-bucket correlation parameter of index buckets from FRTB-SA is not appropriate in the context of counterparty credit spread risk. In particular, that approach does not reflect the nature of CVA risk with respect to a diversified portfolio of credit (long credit risk) and diversified index hedges (short credit risk). In this context, CVA risk and hedges are more akin to two diversified indices that are highly correlated. The Agencies have recognized this high correlation in other contexts of the Proposal but not in the SA-CVA counterparty spread risk delta correlation section.

Based on the QIS results, increasing the cross-bucket correlation to 0.7 would reduce SA-CVA capital requirements by 13[296] percent relative to the Proposal.

Another point of reference is the cross-bucket correlation value of 75 percent for reference credit spread between bucket 16 and bucket 17.[297] A cross-correlation parameter value at or above 70 percent would much more appropriately reflect the economics of credit index hedges of the CVA risk of a portfolio.

From a risk management perspective, a banking organization would enter into index hedging only if the hedge is determined to be effective in managing CVA risk. Figure 8 below shows a hedged exposure relative to an unhedged exposure assuming a correlation of 45 percent based on different hedge ratios (from 10 percent up to 100 percent). This demonstrates that a hedge with a low assumed correlation with the hedged exposure could lead to a total exposure that is higher

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294 Basel Committee, *Consultative Document: Credit Valuation Adjustment Risk: targeted final revisions*, p. 3 (Nov. 2019), *available at* https://www.bis.org/bcbs/publ/d488.pdf; Basel Committee, *Credit Valuation Adjustment Risk: targeted final revisions*, p. 1 (July. 2020), *available at* https://www.bis.org/bcbs/publ/d507.pdf.

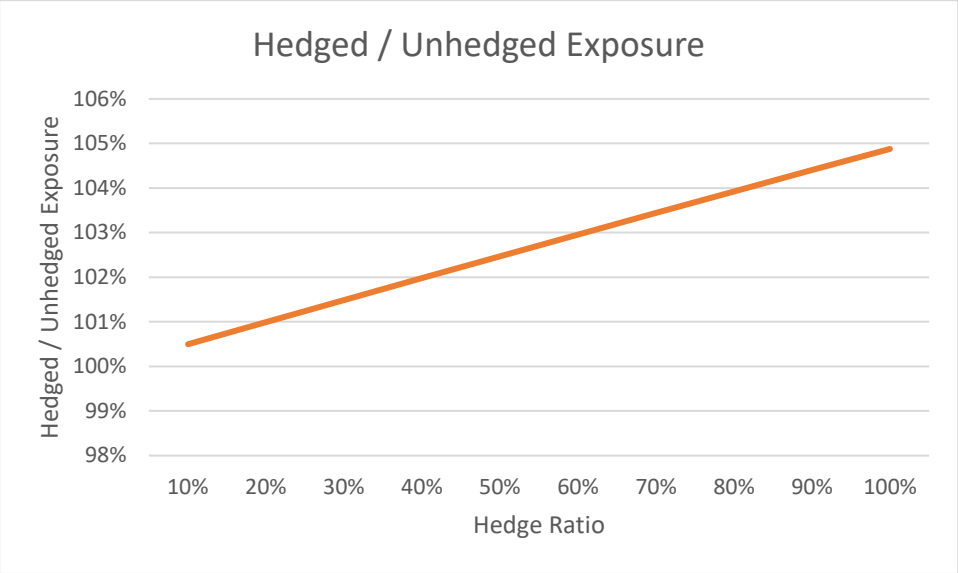
295 Letter from ISDA, the Global Financial Markets Association and the Institute of International Finance, *BCBS consultation – Credit Valuation Adjustment Risk: targeted final revisions* (Feb. 2020).

296 See Appendix 8 – Quantitative Impact Study Results, Index TB_68.

297 Table 6 to § _.225.

than if the banking organization did not enter into the hedge. This type of hedge would not be effective. Accordingly, the calibration in the Proposal would be inconsistent with risk management—a banking organization will enter into a CVA hedge only if the hedge reduces risk.

Figure 8: Hedged vs. Unhedged Exposure



Accordingly, the SA-CVA counterparty credit spread delta cross-bucket correlation between the qualified index bucket and the buckets other than the "Other sector" bucket should be revised to 70 percent.

F. The proposed requirement to obtain prior supervisory approval to split a netting set and apply separately the BA-CVA and SA-CVA approaches under the CVA risk framework would significantly reduce the utility of the SA-CVA approach.

Under the Proposal, a banking organization would be required to obtain prior supervisory approval in order to split a netting set into two netting sets and separately apply the BA-CVA and the SA-CVA approaches to the netting set.[298]

The Associations are concerned that requiring banking organizations to obtain prior approval to split netting sets would significantly limit the ability for banking organizations to use the SA-CVA. This would result in a significant divergence between CVA regulatory capital requirements and CVA risk management processes and lead to overstating CVA capital requirements given the conservative nature of the BA-CVA. This approach would also deviate from the Basel framework.

[298] § _.221(c)(2)(iii).

In practice, a banking organization may need to split a netting set and separately apply the BA-CVA and SA-CVA approaches in the following circumstances:

- Banking organizations currently are required to conduct regular performance testing of pricing models in their CVA systems. A banking organization may need to remove from its simulation models transactions that breach specified thresholds and instead apply the BA-CVA.
- For complex new transactions in a netting set, the banking organization's simulation systems may not have a pricing model to perform simulation on an appropriate scale, such that the banking organization would apply the BA-CVA for these transactions until a suitable model is developed.
- There may be systems or data qualify issues that result in certain transactions encountering pricing failures during simulation runs.

In each of these circumstances, which may arise at any time, it would not be practicable from a timing perspective for a banking organization to seek prior supervisory approval to separately apply the BA-CVA and SA-CVA to a netting set due to operational, technical and related issues.

Accordingly, the final rule should clarify that, at a minimum, splitting a netting set across SA-CVA and BA-CVA due purely to technical pricing model-related issues (e.g., remediation of issues identified in pricing model performance testing, calculation failure of pricing model during simulation or absence of a pricing model for the specific transaction in the netting set) does not require prior approval. It is not practical to seek prior supervisory approval for splitting a netting set in these circumstances because these types of issues may occur shortly before (or during) a banking organization's capital calculation processes at quarter-end, for which there are typically strict deadlines for completing calculations. These calculations generally are computationally intensive, such that performing the calculation for portfolios as a result of trade failures or remediation of pricing model issues may not be practicable. The exceptions for technical pricing model-related issues are intended to enhance the integrity of the SA-CVA calculation and align with regulatory objectives of achieving accurate regulatory capital calculations.

G. The requirements regarding matching external transaction for internal transfers of CVA risk should be removed.

The Proposal would include a definition of eligible CVA hedge that includes a list of CVA hedges, which would vary depending on whether the banking organization is applying BA-CVA or SA-CVA.[299] For internal transfers of CVA risk, a banking organization would be required to satisfy specified requirements in order to consider the internal risk transfer of CVA risk to be an eligible internal risk transfer, including that if the internal risk transfer of CVA risk is subject to curvature risk, default risk or the residual risk add-on, the trading desk must execute an external transaction with a third-party provider that is identical in its terms to the internal risk transfer of CVA risk.[300]

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[299] § _.202(b).

[300] § _.205(h)(2)(i)(C).

A banking organization should be permitted to recognize the risk mitigation benefits of an internal CVA hedge even if the trading desk has not executed an external transaction with a third-party provider that is identical in its terms to the internal risk transfer of CVA risk. In many circumstances, it will not be operationally practicable to execute an identical hedge to the extent the banking organization hedges CVA risk on a portfolio basis. It is often more efficient and cost-effective for a banking organization to hedge CVA risks on a portfolio basis, as opposed to by individual transaction. When the banking organization hedges CVA risk on a portfolio basis, it will not be possible to match an external transaction with the internal CVA hedge on a one-to-one basis. In addition, if the trading desk uses a cleared transaction to externalize the internal CVA hedge, the banking organization cannot easily match the internal hedge with an external facing transaction due to netting, compression and related operational processes. More broadly, requiring a banking organization to enter into an external transaction on a trade-by-trade basis would contradict other regulatory and policy objectives to reduce interconnectedness, particularly between GSIBs. Specifically, this requirement could increase the number of transactions between a banking organization and third parties.

The requirement for matching external transactions would raise particular issues with respect to internal risk transfers subject to curvature risk, which would generally be defined under the Proposal as "the incremental risk of loss of a market risk covered position that is not captured by the delta capital requirement arising from changes in the value of an option or embedded option."[301] A banking organization may use options to hedge CVA risk and, in these circumstances, may hedge CVA risk on a portfolio basis. In these circumstances, the banking organization would not have a perfectly offsetting transaction with a third party and, as a result, would not be permitted to recognize the portfolio hedges as eligible CVA hedges under the Proposal.

Relatedly, the proposed documentation requirements for an internal risk transfer of CVA risk to qualify as an eligible internal risk transfer would impose onerous monitoring requirements and increase operational risks and costs without a clear economic, risk management or supervisory benefit. This approach would result in a misalignment of the economics and regulatory capital treatment of hedging transactions and could increase the costs of hedging transactions for customers. This requirement also could create tensions with the clearing and trade compression processes of central counterparties.[302] With respect to CVA risk in particular, the proposed requirement to identify the underlying exposure that is hedged and the source of the risk does not align with current CVA risk management practices and would impose undue operational burdens. In general, banking organizations hedge CVA risk on a portfolio basis to enhance efficiency and reduce costs.

H. A banking organization should be permitted to recognize collateral under the SA-CVA consistent with financial reporting.

With respect to the SA-CVA, the Proposal provides that, for margined counterparties, only financial collateral that qualifies for inclusion in the net independent collateral amount or

[301] § _.202(b).

[302] Similar issues would arise with respect to the proposed documentation requirements for an internal risk transfer of credit risk and interest rate risk.

variation margin amount under the SA-CCR framework may be recognized as a risk mitigant.[303] However, the Proposal further provides that, under the SA-CVA, a banking organization "must recognize netting in the same manner as used by the banking organization for financial reporting purposes."[304]

There are circumstances in which collateral may be recognized under GAAP but would not be recognized under SA-CCR. For example, collateral must be eligible financial collateral to be recognized as a credit risk mitigant under SA-CCR. It would not be appropriate to so limit the recognition of collateral for purposes of calculating CVA risk capital requirements under the SA-CVA. The proposed approach would lead to deviations between regulatory CVA sensitivities and accounting CVA sensitivities for CVA risk management purposes. It also would create operational complexities because a banking organization would be required to maintain two separate collateral calculations in its CVA systems.

The Associations therefore recommend that collateral recognition for purposes of SA-CVA be aligned with the collateral recognition framework for accounting CVA. In addition to enhancing operational simplicity, this alignment would be consistent with the overarching principle that "[e]xposure models used in the calculation of regulatory CVA" are "part of a CVA risk management framework that includes the identification, measurement, management, approval, and internal reporting of CVA risk."[305] This recommended approach also would generally align netting recognition under SA-CVA and accounting CVA.

I. A banking organization should be permitted to assign a lower MPOR for purposes of CVA risk capital requirements.

The preamble to the Proposal provides that a minimum length of time for the MPOR would be specified for purposes of SA-CVA. Under SA-CVA, the minimum MPOR would be 10 business days for bilateral transactions.[306]

In general, a banking organization should be permitted to assign a lower MPOR than the periods specified in the Proposal. Significant improvements have been made to the functioning and efficiency of OTC derivatives markets, including the introduction of margin rules for uncleared swaps that require counterparties to post initial margin for a wide range of transactions and to exchange variation margin on a daily basis, each of which has meaningfully reduced risk. The initial margin requirements for uncleared swaps require initial margin to meet a 99 percent confidence level of cover over a 10-day margin period of risk.

As a result, studies show that, as a general matter, a banking organization calculating fair value for purposes of U.S. GAAP for these derivative uses an MPOR less than 10 days in light of the margin requirements for uncleared swaps, as banking organizations are able to unwind or replace derivatives with defaulted counterparties within two to four days. Incorporating an MPOR of 10

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303 § _.224(d)(8).

304 § _.224(d)(12).

305 § _.223(b)(1).

306 88 Fed. Reg. at 64,160.

business days would result in a divergence between accounting and risk management practices, which may increase systemic risk to the extent that banking organizations enter into transactions to mitigate regulatory CVA capital requirements even when there is no economic risk.

Therefore, the Associations recommend that the minimum MPOR should be recalibrated to at most five business days for CVA risk covered positions that are subject to regulatory margin requirements for uncleared swaps.

J. Certain of the Associations' recommendations in Section I should also apply for purposes of SA-CVA.

The following recommendations in Section I of this letter with respect to aspects of FRTB-SA also would apply in the context of the SA-CVA:

- Treatment of sovereign exposures, MDB exposures and supranational exposures under SBM (Section I.B);
- Delta equity risk buckets in SBM with respect to equity positions and debt positions in REITs (Section I.I);
- Treatment of hedges of municipal bonds in SBM to reflect tax-exempt status (Section I.K.1);
- Risk weight in SBM for gaseous combustibles and electricity (Section I.R);
- Risk weight in SBM for carbon trading (Section I.S); and
- Index bucket in SBM for commodities (Section I.U).

VII Recommendations Regarding SA-CCR and Other Counterparty Credit Risk Matters

Industry QIS Results

Based on the QIS results, the total ERBA derivatives CCR RWA would be 0.97[307] times the current derivatives CCR RWA.

[307] See Appendix 8 – Quantitative Impact Study Results, Index TB_69.

Figure 9: QIS Derivatives CCR RWA Impact

Impact of Derivatives Quantified CCR Mitigation Items:

1. **Treat broker dealers as banks**: Reduction of $8 billion[308] RWA.
2. **Assign lower IG corporate risk weight of 65 percent to highly regulated IG entities even if no publicly traded security is issued by the entity or its parent**: Reduction of $32 billion[309] RWA.
3. **Assign lower IG corporate risk weight of 65 percent to IG corporates even if no publicly traded security is issued by the entity or its parent** (impact does not include highly regulated entities): Reduction of $40 billion[310] RWA.
4. **Align short-term RW for banks with that of the Basel framework**: all bank exposures of less than or equal to 3 months subject to lower risk weight in Table 2 to § _.111: Reduction of $30 billion[311] RWA.
5. Mitigation items below would cumulatively lead to an additional $14 billion[312] RWA reduction:
    - Allow STM trades at netting set level to be treated as CTM for client-cleared exposures.
    - Allow STM trades at netting set level to be treated as CTM for bilateral exposures.
    - Allow decomposition of indices of non-linear trades (e.g., tranches, options).
    - Allow for lower supervisory factor for developed market equities in alignment with FRTB.

Although the Associations were not able to quantify fully all effects of our recommended changes to the Proposal, further revisions are needed more broadly as outlined herein to avoid

308 See Appendix 8 – Quantitative Impact Study Results, Index TB_70.

309 See Appendix 8 – Quantitative Impact Study Results, Index TB_71.

310 See Appendix 8 – Quantitative Impact Study Results, Index TB_72.

311 See Appendix 8 – Quantitative Impact Study Results, Index TB_73.

312 See Appendix 8 – Quantitative Impact Study Results, Index TB_74.

negative implications for the U.S. capital markets and resulting effects on investors and consumers.

A. The netting treatment currently available for cleared transactions should be applied to bilateral OTC derivatives and client-facing exposures of cleared transactions.

Under the SA-CCR final rule, a banking organization may elect, at the netting set level, to treat all settled-to-market ("**STM**") contracts within the same netting set that are cleared transactions as collateralized-to-market ("**CTM**").[313] As reflected in guidance published by the Agencies, a cleared transaction is considered STM if daily payments of variation margin reflecting changes in the mark-to-market value of the cleared transaction is considered a settlement payment.[314] In contrast, for a CTM cleared transaction, title of the transferred collateral stays with the posting party.[315] The current SA-CCR approach permits a banking organization to net STM derivative contracts with CTM cleared derivative contracts that are within the same netting set.

This treatment, which currently applies to cleared transactions, should be expanded such that a banking organization may elect to treat both STM bilateral OTC derivatives and STM client-facing exposures on cleared transactions as CTM, in order to extend netting benefits to these transactions. Currently, the inability to treat OTC derivatives and the client-facing legs of cleared transactions as CTM leads to higher hedging costs. The Association's recommended approach would be more aligned with the economic risk of these transactions given that benefits of netting apply for both bilateral OTC derivatives and cleared transactions. Additionally, with respect to the client-facing leg of cleared transactions, the recommended approach would enhance incentives for central clearing because, although a banking organization currently may net STM derivative contracts with CTM cleared derivative contracts within the same netting set, that treatment currently does not apply to a banking organization's exposure to its client on a transaction cleared through a CCP.

B. SA-CCR equity supervisory factors should be aligned with the FRTB risk weights.

Table 3 to Section 132 of the current U.S. capital rules (and Table 2 to § _.113 in the Proposal) includes supervisory factors with respect to specified asset classes, including single name equities and index equities. The preamble to the final SA-CCR rule indicated that the Agencies would potentially consider further adjustments to the supervisory factors for equity derivative contracts to align with the revised Basel III market risk standard.[316]

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313 85 Fed. Reg. at 4,389.

314 FDIC, Federal Reserve, OCC, *Regulatory Capital Treatment of Certain Centrally-cleared Derivative Contracts Under Regulatory Capital Rules* (Aug. 14, 2017), *available at* https://www.federalreserve.gov/supervisionreg/srletters/sr1707.pdf.

315 FDIC, Federal Reserve, OCC, *Regulatory Capital Treatment of Certain Centrally-cleared Derivative Contracts Under Regulatory Capital Rules* (Aug. 14, 2017), *available at* https://www.federalreserve.gov/supervisionreg/srletters/sr1707.pdf.

316 85 Fed. Reg. at 4,383.

As outlined in the joint Associations' letter in response to the SA-CCR proposed rule, the SA-CCR equity supervisory factors are higher than is appropriate based on empirical analysis.[317] Consistent with the preamble in the SA-CCR final rule, the equity supervisory factors in SA-CCR should be aligned with the proposed revisions to implement FRTB which should achieve a more risk-sensitive and consistent calibration. For this purpose, the Associations analyzed the FRTB-SA risk weights to determine how SA-CCR is calibrated in relative terms. The FRTB risk weights translated to the equivalent SA-CCR risk weights are as follows:

$$SF_{SA-CCR} = \frac{RW_{FRTB}\sqrt{\frac{250}{LH_{FRTB}}}}{\frac{3}{2}2.33\sqrt{2\pi}}$$

One possible way to align the risk weights would be to replace the current single supervisory factor for equities with two, one for liquid market economy equities and one for emerging market economy equities. Table 9 below illustrates the proposed FRTB-SA supervisory factors provided in Table 8 to § _.209 and the equivalent SA-CCR supervisory factors:

Table 9: Proposed FRTB-SA Supervisory Factors and Equivalent SA-CCR Supervisory Factors

Bucket	Market Cap	Economy	Sector	Risk Weight	SA-CCR Equivalent	SA-CCR Equivalent Grouped
1	Large	Emerging market economy	Consumer goods and services	55%	31%	31%
2			Telecommunications	60%	34%	
3			Basic materials	45%	26%	
4			Financials	55%	31%	
5		Liquid market economy	Consumer goods and services	30%	17%	22%
6			Telecommunications	35%	20%	
7			Basic materials	40%	23%	
8			Financials	50%	29%	
9	Small	Emerging market economy	Buckets 1, 3, 4, and 4	70%	28%	28%
10		Liquid market economy	Buckets 5, 6, 7, and 8	50%	20%	20%

[317] Letter from ISDA, SIFMA, the American Bankers Association, the Bank Policy Institute and the Futures Industry Association, *Standardized Approach for Counterparty Credit Risk*, pp. 42-44 (Mar. 18, 2019), *available at* https://www.isda.org/a/XFKME/US_SA-CCR_NPR_Response_Letter_03.18.19.pdf.

Based on this, the supervisory factor for emerging market economy equities could be set at the current supervisory factor of 32 percent, which would still be conservative. The additional supervisory factor for liquid market economy equities could be set at 22 percent.

For consistency, the supervisory factors for equity indices should be expanded as well. The existing supervisory factor of 20 percent would be assigned to emerging market economy equities. For liquid market economy indices, a supervisory factor should be set that is consistent with the correlation factors for indices (80 percent) in comparison to single-name equities (50 percent), which would result in a supervisory factor for liquid market economy indices of 50 percent *divided by* 80 percent *multiplied by* 22 percent = 14 percent.

In summary, the Associations recommend expanding the current equity supervisory factors under SA-CCR as follows:

Table 10: Proposed SA-CCR Supervisory Factors for Equities

Current SA-CCR supervisory factors for equities	Proposed SA-CCR supervisory factors for equities
Single Name: 32% Indices: 20%	Single Name for Emerging Market Economy Equities: 32% Single Name for Liquid Market Economy Equities: 22% Emerging Market Economy Index: 20% Liquid Market Economy Index: 14%

This alignment of SA-CCR supervisory factors for equities with FRTB would greatly improve the risk sensitivity of SA-CCR with respect to equities.

C. The rules text should be revised to permit a banking organization to decompose non-linear indices.

The Associations do not support the proposed clarification that non-linear trades on indices, in particular plain-vanilla options, must not be decomposed. Decomposition enhances risk sensitivity and should be available to both linear and non-linear trades on indices.

Index decomposition of non-linear instruments is consistent with other aspects of the Proposal, including with respect to the proposed market risk capital rules (in particular, SBM). Furthermore, given that the Proposal does not include an index bucket for commodities risk, decomposition would be the only way to reflect the diversification benefits of multiple commodities referenced by an index.

This issue would arise in particular when a banking organization, on behalf of a client, enters into an option on an ETF that tracks the S&P 500 (such as the SPDR S&P ETF) and separately

enters into an option on the S&P 500. In these circumstances, treating the ETF and the S&P 500 option as separate reference entities severely overstates the risk profile of these positions. Similarly, when a counterparty has a balanced long and short portfolio of indices, decomposition would lead to a more risk-sensitive regulatory capital exposure calculation because decomposition allows greater reduction in the idiosyncratic component of the hedging set amount calculation under SA-CCR. The two components of the SA-CCR add-on formula for equities are listed below:

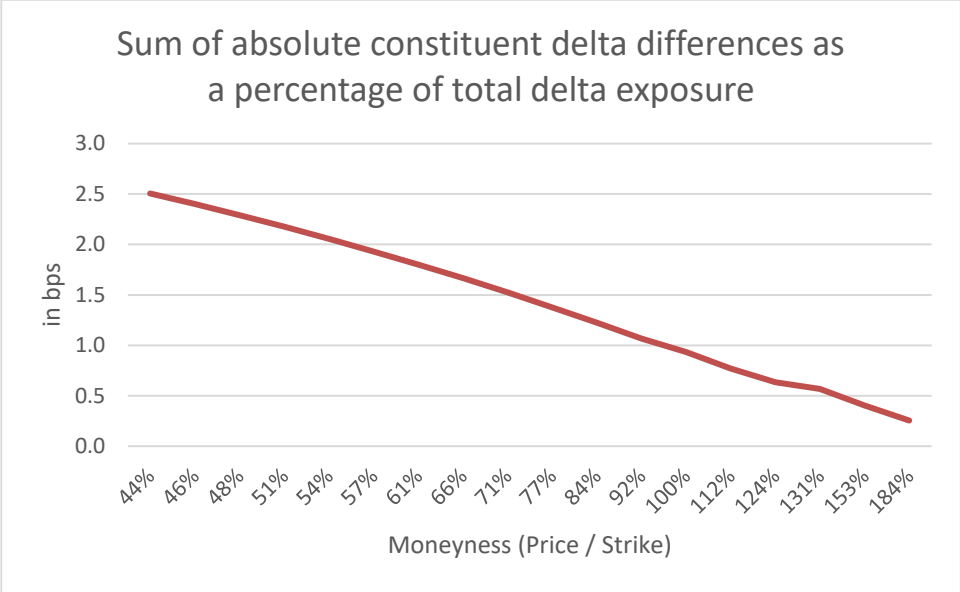
$$Hedging\ set\ amount = \sqrt{\left(\sum_{k=1}^{K} \rho_k AddOnRef_k\right)^2 + \sum_{k=1}^{K} (1 - \rho_k{}^2) AddOnRef_k^2}$$

The systematic component is highlighted in green and the idiosyncratic component is highlighted in yellow. With respect to a portfolio in which the banking organization is long an index and short another index, with each index having an equal value with no overlapping constituent exposures and 100 equally weighted constituents:

- The systematic component will be zero with or without decomposition.
- With decomposition, the idiosyncratic component is smaller than when decomposition is not allowed and a larger exposure, i.e., the entire index is squared. In such a situation, the add-on without decomposition is larger by a factor of over 4x than with decomposition, taking into account the difference in supervisory factors and correlation parameters.

The Associations propose that decomposition of options should be implemented by allowing banking organizations to calculate an index level delta and applying the same delta to all constituent exposures. The Associations acknowledge that the results might be different compared to an actual calculation where each constituent is shocked instead of the index itself. However, the difference for plain-vanilla options (i.e., American or European style options) on well-diversified indices should be minimal. To demonstrate this, the Associations have performed a calculation for call options on the S&P 500 index with different strike levels relative to the index price with an option expiry date of more than six months. In this calculation, the Associations used the simplified Black-Scholes formula under SA-CCR with the prescribed implied volatility of 75 percent for index options and compared the constituent level exposures using two approaches: 1) calculating one index level delta and applying it equally to all its constituents and 2) calculating for each constituent the difference between the base option value and a shocked value by increasing each constituent value by one percent. Figure 10 below illustrates the sum of the absolute differences of all constituent delta exposures relative to the delta exposure for the index across different levels of moneyness:

Figure 10: Sum of Absolute Constituent Delta Differences as a Percentage of Total Delta Exposure



This shows that the absolute error is very small—less than three basis points. The Associations acknowledge that the error might be higher for less diversified indices. For example, if the index had five equally weighted constituents, the error might range from three basis points to 30 basis points which is also very low.

While the Associations believe decomposition should be permitted broadly given the small errors, permitting decomposition would significantly improve risk sensitivity with respect to plain-vanilla options (American or European style) on "well-diversified" indices (a defined term in the current U.S. capital rules).[318]

D. The requirement for the issuer or a parent to have a security listed on a public exchange to receive a 65 percent risk weight should be removed.

Under the proposed credit risk framework in ERBA, a banking organization would assign a 65 percent risk weight for a corporate exposure to a company that is investment grade and that has a publicly traded security outstanding, or is controlled by a company that has a publicly traded security outstanding.[319]

Investment-grade corporate counterparties (as defined under the current U.S. capital rules) should receive a 65 percent risk weight as opposed to 100 percent irrespective of whether the entity (or its parent) has securities listed on a securities exchange. The industry, in a comment

[318] Under Footnote 34 to Section 210 of the current U.S. capital rules, a portfolio is considered "well-diversified if it contains a large number of individual equity positions, with no single position representing a substantial portion of the portfolio's total fair value."

[319] § _.111(h)(1).

letter submitted by the American Bankers Association ("**ABA**") and the Bank Policy Institute ("**BPI**"), has prepared detailed recommendations regarding how the Agencies should revise the design of this aspect of the proposed credit risk framework in ERBA.[320]

The Associations support those recommendations and urge the Agencies to consider them carefully in order to mitigate the potential negative effects of the Proposal.

E. The application of the definition of investment grade should be clarified.

Under the Proposal, an exposure to a corporate counterparty would be eligible for a reduced 65 percent if the counterparty is considered investment grade and the counterparty or a parent entity has publicly traded securities.[321] Currently, under the standardized approach, exposures to corporate counterparties are generally required to be risk weighted at 100 percent, irrespective of whether the counterparty would otherwise be investment grade. Under the current U.S. capital rules, "investment grade" means:

> that the entity to which the [banking organization] is exposed through a loan or security, or the reference entity with respect to a credit derivative, has adequate capacity to meet financial commitments for the projected life of the asset or exposure.

The Proposal would not modify the definition of investment grade in Section 2 of the current U.S. capital rules. This definition, by its terms, applies only with respect to loans, securities, or a reference entity with respect to a credit derivative, but it does not specifically apply to other types of transactions, including derivatives transactions or repo-style transactions.

Accordingly, the definition of investment grade in Section 2 of the current U.S. capital rules should be revised to include any exposure to which the U.S. capital rules would apply that definition, including derivatives transactions and repo-style transactions.[322]

VIII Recommendations Regarding the Effects of the Proposal on Clearing Businesses

Impact of the Proposal

Most of this letter deals with the potential effects on derivatives markets broadly. In this section, the Associations describe how the proposed changes would affect the clearing businesses of U.S. GSIBs that act as FCMs (a "**GSIB FCM**").

The impact presented herein is based on QIS responses of the six GSIB FCMs.

Under the current capital framework, the standardized approach is the binding constraint for these GSIBs. Under the standardized approach, the RWA associated with client clearing is

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320 See Section IV.A.2 of the ABA/BPI letter.

321 § _.111(h)(1).

322 The Agencies also should clarify in that the definitions of "speculative grade" and "sub-speculative grade" in Section 2 of the current U.S. capital rules also apply to any applicable transaction under the U.S. capital rules, including derivative transactions and repo-style transactions.

driven by two components: (i) the CCR component associated with the client leg exposure and (ii) capital requirements for default fund contributions. Under the Proposal, ERBA is expected to replace the standardized approach as the binding constraint for the GSIB FCMs. Under ERBA, a GSIB FCM's capital requirement would increase compared to the current framework due in particular to the addition of the CVA and operational risk charge.

Based on the QIS analysis, RWA for the GSIB FCMs would increase from $76.1 billion[323] to $101.9 billion[324] as a result of the Proposal, a 34 percent increase primarily driven by the addition of operational risk and CVA capital requirements. In capital terms, the requirement would go up by $2 billion[325], or 22%[326].[327]

In addition to the direct increase in capital requirement as a result of the Proposal, several parallel changes in the U.S. GSIB framework would increase the GSIB surcharge related to client-cleared exposures for the GSIB FCMs, as follows:

- Inclusion of the client leg of client-cleared transactions under the agency model in the Complexity indicator;
- Inclusion of the client leg of client-cleared transactions under the agency model in the Interconnectedness indicator;
- Expansion of financial institution definition and implementation of SA-CCR in the Interconnectedness indicator.

These changes would increase the GSIB surcharge for the GSIB FCMs. This means that, on top of the increase of capital requirements as described above, there would also be further capital requirements driven by the GSIB surcharge increase. As the GSIB surcharge applies to the totality of RWA of GSIBs, even a small increase in the GSIB surcharge will translate into a large increase of capital requirements. The capital impact estimate as a result of this change in the GSIB surcharge is $5.2 billion[328].

The sum of the capital requirements directly attributable to the clearing business under ERBA plus the increased capital requirements as a result of increases in the GSIB surcharge driven by

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323 See Appendix 8 – Quantitative Impact Study Results, Index TB_75.

324 See Appendix 8 – Quantitative Impact Study Results, Index TB_76.

325 See Appendix 8 – Quantitative Impact Study Results, Index TB_77.

326 See Appendix 8 – Quantitative Impact Study Results, Index TB_78.

327 The capital impact reflects the RWA impact and the minimum capital requirements as applicable to the standardized approach and ERBA, including the SCB and the GSIB surcharge. For this analysis, the GSIB surcharge under ERBA would increase by 10 basis points, reflecting the 11 GSIB points estimated increase due to cross-jurisdictional derivative exposure inclusion and 9 GSIB points estimated increase due to averaging effect, as outlined in the GSIB proposal. Federal Reserve, *Regulatory Capital Rule: Risk-Based Capital Surcharges for Global Systemically Important Bank Holding Companies; Systemic Risk Report (FR Y-15)*, 88 Fed. Reg. 60,385, 60,397 (Sept. 1, 2023). Both of these effects are unrelated to clearing to avoid double counting with the subsequent clearing-focused GSIB impact.

328 See Appendix 8 – Quantitative Impact Study Results, Index TB_79.

clearing would be $16.2 billion[329]. Compared to the capital requirements in relation to client clearing under the current standardized approach, this would be an increase of over 80[330] percent.

Impact of Clearing Business Quantified Mitigation

Capital requirements are already one of the constraints for clearing businesses that affect the capacity of banking organizations to provide client-clearing services, including in respect of additional potential clients or transactions for existing clients. Capital requirements may also affect the ability of an FCM to accept clients of a defaulted clearing member should these clients wish to be ported to the FCM. Given the focus on enhancing central clearing as a key financial reform in order to reduce financial stability risks, the capacity for banking organizations to provide clearing services should not be unduly constrained through an overcalibration of capital requirements.

If clearing capacity is already constrained, it might be challenging to add a new asset class (U.S. Treasuries and repos) to the set of products broadly subject to mandatory clearing. Increased capital requirements in respect of clearing activities could impede the implementation of the SEC's recently finalized clearing requirements for U.S. Treasury security transactions.[331] We urge the Agencies to consider the aggregate impact of its proposed rules on the provision of critical financial services—including client clearing—and consult with the SEC and the CFTC on the interaction of their proposals with other regulatory mandates in critical markets.

In order to avoid further constraining clearing businesses, we offer the following recommendations to mitigate the capital increases in the Proposal:

1. **GSIB surcharge**: Do not implement the inclusion of client-cleared exposures under the agency model in the Complexity indicator and the Interconnectedness indicator. This recommendation would mitigate the increases of the GSIB surcharge driven by client-clearing businesses and reduce the capital requirement by $5.6 billion[332].
2. **CVA capital charge**: Exclude client-cleared transaction from the CVA capital charge under ERBA. These exposures are not subject to CVA under U.S. GAAP and there is therefore no risk to capitalize. Please refer to Section VI.B for more details. Removing CVA capital requirements for client-cleared transactions would reduce the capital requirements by $957 million[333].

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329 See Appendix 8 – Quantitative Impact Study Results, Index TB_80.

330 See Appendix 8 – Quantitative Impact Study Results, Index TB_81.

331 SEC, Standards for Covered Clearing Agencies for U.S. Treasury Securities and Application of the Broker-Dealer Customer Protection Rule With Respect to U.S. Treasury Securities (Dec. 13, 2023), available at https://www.sec.gov/files/rules/final/2023/34-99149.pdf.

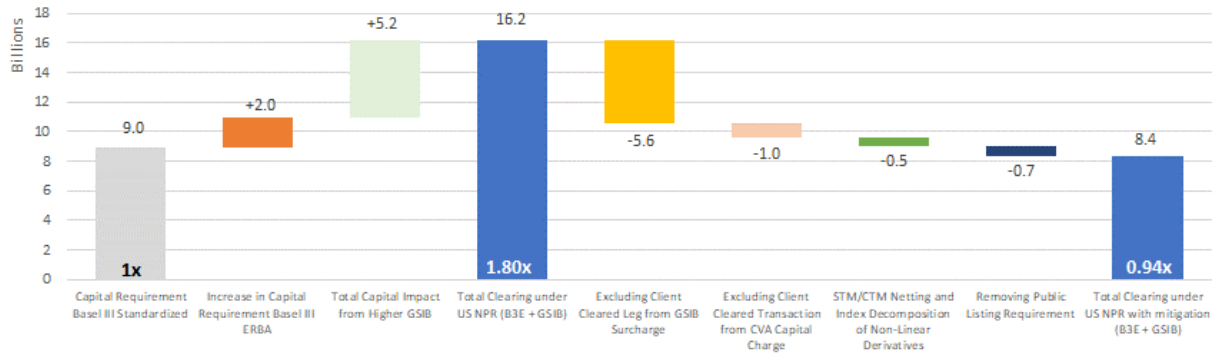
332 See Appendix 8 – Quantitative Impact Study Results, Index TB_82.

333 See Appendix 8 – Quantitative Impact Study Results, Index TB_83.

3. **Counterparty Credit risk charge**:
    a. Allow a banking organization to net STM with client cleared CTM transactions consistent with cleared transactions. Please refer to Section VII.A for more details.
    b. Allow index decomposition of non-linear derivatives, in particular plain-vanilla European or American options, consistent with linear derivatives. Please refer to Section VII.C for more details. Extending the netting treatment of STM/CTM to client clearing and allowing index decomposition of non-linear derivatives would reduce capital requirements for the GSIB FCM's clearing businesses by $530 million[334].
    c. Allow recognition of all investment-grade corporate debt (remove public listing requirement) for risk-weight purposes. Please refer to Section VII.D for more details. Removing this public listing requirement would reduce capital requirements for the GSIB FCM's clearing businesses by $654 million[335].

Collectively, these mitigants would reduce the significant impact of the Proposal for GSIB FCMs' clearing businesses and even provide a 6 percent[336] reduction against the current Basel III capital requirements. This would be aligned with encouraging central clearing, including with respect to banking organizations providing clearing services to customers.

Figure 11: QIS Clearing Impact



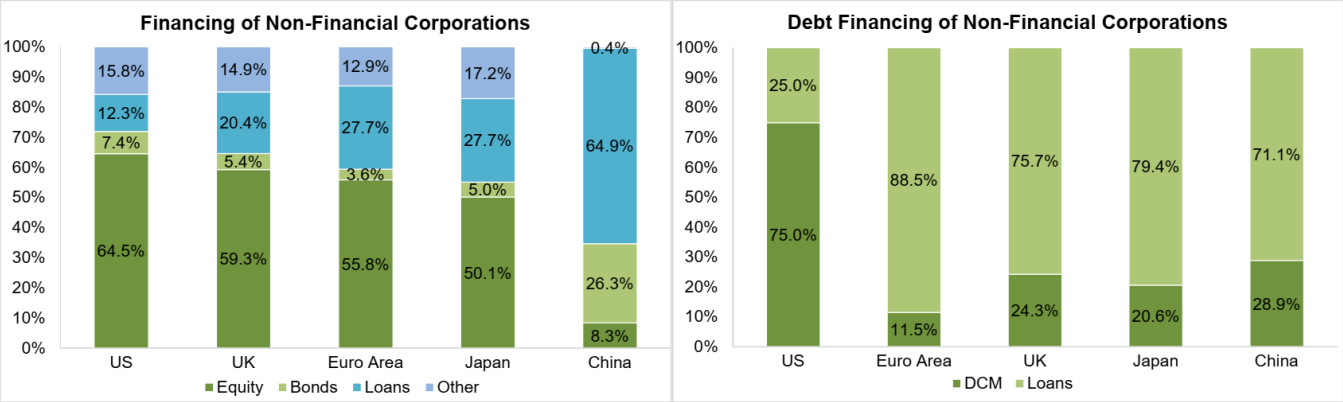
334 See Appendix 8 – Quantitative Impact Study Results, Index TB_84.

335 See Appendix 8 – Quantitative Impact Study Results, Index TB_85.

336 See Appendix 8 – Quantitative Impact Study Results, Index TB_86.

Appendix 1 – Annex to the Executive Summary

Figure 12: Chart comparing the corporate bond and bank lending allocations in the United States, Euro Area, Japan and China



Source: OECD, Federal Reserve, ECB, Bank of Japan, National Bureau of Statistics of China, SIFMA estimates
Note: As of 2022, China 2020; Economic activity defined as financing of non-financial corporations. Euro Area = 19 EU-member states using the Euro. Other financing, ex-China = insurance reserves, trade credits and trade advances; other financing, China = bankers' acceptances, FDI, other foreign A/D, misc. and errors; DCM = debt capital markets, corporate bonds only

Source: OECD, ECB, Bank of Japan, National Bureau of Statistics of China
Note: As of 2022, China 2020. Economic activity defined as financing of non-financial corporations. Euro Area = 19 EU-member states using the Euro. Other financing, ex-China = insurance reserves, trade credits and trade advances; other financing, China = bankers' acceptances, FDI, other foreign A/D, misc. and errors

Table 11: Underwriting Market Shares by Product & Firm Group

	US	Foreign	GSIB
MBS	71.0%	21.4%	92.4%
Corporate Bonds - IG	55.0%	35.1%	90.1%
Corporate Bonds - All	53.4%	35.5%	88.9%
ABS	49.1%	38.9%	88.0%
Equities - Secondary	61.3%	21.8%	83.1%
Corporate Bonds - HY	45.3%	37.5%	82.8%
Equities - All	58.2%	23.6%	81.8%
Equities - IPOs	48.0%	29.5%	77.5%
Munis	54.6%	10.5%	65.2%

Source: Dealogic, Refinitiv, SIFMA estimates

Appendix 2 – Collateral Haircut Approach and Securities Financing Transactions

This Appendix addresses questions in the Proposal regarding the collateral haircut approach and SFTs, including the proposed minimum haircut floor framework.

Question 48: What would be the impact of requiring that certain debt securities must be issued by a publicly-traded company, or issued by a company controlled by a publicly-traded company, in order to qualify as financial collateral and what, if any, alternatives should the agencies consider to this requirement?

See Section **Error! Reference source not found.** for a Response to this Question.

Question 49: The agencies seek comment on the appropriateness of allowing banking organizations to recognize in full the effective notional amount of credit derivatives that do not include restructuring as a credit event, if certain conditions are met. Is the exemption from the 40 percent haircut overly broad? If so, why, and how might the exemption be narrowed to only capture the types of credit derivatives that provide protection similar to credit derivatives that include restructuring as a credit event?

The Associations do not support narrowing the exemption, absent an opportunity for ISDA, SIFMA and its members to evaluate and analyze alternatives and related effects on regulatory capital calculations.

Question 51: What are the advantages and disadvantages of the proposed methodology for calculating the exposure amount for eligible margin loans and repo-style transactions covered by a QMNA?

See Section I.B for a Response to this Question.

Question 52: What would be the advantages and disadvantages of an alternative method to calculate the number of instruments N based on the number of legal entities that issued or guaranteed the instruments?

See Section I.B for a Response to this Question. The Associations support determining the number of instruments N based on the number of instruments with a unique CUSIP designation (or foreign equivalent), as set forth in the proposed formula.

Question 53: What are the advantages and disadvantages of allowing banking organizations to apply the full look-through approach for certain collateral in the form of mutual fund shares? What alternative approaches should the agencies consider for banking organizations to determine the market price volatility haircuts for collateral in the form of mutual fund shares?

The Associations support permitting a banking organization to apply the full look-through approach to determine the market price volatility haircut for mutual fund shares in lieu of determining the haircut based on the highest haircut applicable to any security held by the mutual fund.

In general, a mutual fund may invest in a wide variety of instruments such that the volatility of mutual fund shares is much smaller than the volatility of the highest haircut applicable to a security held by the mutual fund. Although the full look-through approach would not recognize the diversification benefits attendant to mutual fund shares, that approach would result in a more risk-sensitive approach. This treatment also would be consistent with the Basel framework.

Question 54: What entities should be included or excluded from the scope of entities subject to the minimum haircut floors and why? For example, what would be the advantages and disadvantages of expanding the definition of entities that are scoped-in to include all counterparties, or all counterparties other than QCCPs? What impact would expanding the scope of entities subject to the minimum haircut floors have on banking organizations' business models, competitiveness, or ability to intermediate in funding markets and in U.S. Treasury securities markets?

The definition of entities scoped-in to the minimum haircut floor framework should not be expanded. It would not be appropriate to include mutual funds and pension funds within the scope of entities subject to the minimum haircut floors.

In general, mutual funds and pension funds are already subject to restrictions regarding their use of leverage. These entities engage in securities-lending activities to produce additional income for their beneficiaries (in the case of pension funds) and investors (in the case of mutual funds). Implementing minimum haircut floors in a manner that limits the ability of mutual funds and pension funds to engage in securities-lending transactions would have adverse effects not only on mutual funds and pension funds but also their downstream beneficiaries and investors. Specifically, as noted by the SEC in the context of a proposal on securities loan reporting, "[b]eneficial owners of large, static, unleveraged portfolios, mainly pension funds, increasingly cite securities lending as an important income-enhancing strategy with minimal, or at least controlled, risk. This incremental income not only helps defined-benefit pension funds to generate income, but also provides investment company investors with additional returns."[337]

Question 55: What alternative definitions of "in-scope transactions" should the agencies consider? For example, what would be the pros and cons of an expanded definition of "in-scope transactions" to include all eligible margin loan or repo-style transactions in which a banking organization lends cash, including those involving sovereign exposures as collateral? How would the inclusion of sovereign exposures affect the market for those securities? What, if any, additional factors should the agencies consider concerning this alternative definition?

The definition of "in-scope transactions" should not be expanded to include all eligible margin loans or repo-style transactions in which a banking organization lends cash. Including transactions involving sovereign exposures as collateral would have harmful effects on U.S. Treasury markets in particular, with downstream adverse effects on borrowers and the U.S. economy and financial system more broadly.

[337] SEC, *Reporting of Securities Loans*, 86 Fed. Reg. 69,802, 69,804 (Dec. 8, 2021) (footnote text omitted).

Question 56: What, if any, difficulties would banking organizations have in identifying transactions that would be exempt from the minimum haircut floor?

See Section IVI.B and Section VI.C for a Response to this Question.

Question 57: What, if any, operational burdens would be imposed by the proposal to require banking organizations to maintain sufficient written documentation to exempt transactions with an unregulated financial institution where the banking organization is seeking to borrow securities from an unregulated financial institution to meet a current or anticipated demand?

See Section I.C for a Response to this Question.

Question 58: What alternative minimum haircut floors should the agencies consider and why? What would be the advantages and disadvantages of setting the minimum haircuts at a higher level, such as at the proposed market price volatility haircuts used for recognition of collateral for eligible margin loans and repo-style transactions, or at levels between the proposed minimum haircut floors and the proposed market price volatility haircuts?

The minimum haircuts should not be set at a higher level than the levels provided in the Proposal, which are already too high in many cases as discussed in Section I.F.

Question 59: Where a banking organization has exchanged multiple securities for multiple other securities under a QMNA with an unregulated financial institution, what would be the costs and benefits of providing banking organizations the flexibility to apply a single-transaction haircut floor on a transaction-by-transaction basis for in-scope transactions within the netting set, rather than applying a portfolio-based floor? Under this approach, each in-scope transaction within a netting set would be evaluated separately. Banking organizations would be permitted to recognize the risk-mitigation benefits of collateral for individual transactions that meet the single-transaction haircut floor, even if the netting set did not meet the portfolio-based floor.

The Associations would not support evaluating separately each in-scope transaction within a netting set. This approach would unduly limit a banking organization's recognition of a general pool of collateral in respect of a netting set of eligible margin loans and repo-style transactions and, relatedly, would require a banking organization to artificially split a netting set of these transactions.

Question 60: How can the proposed formulas used for determining whether an in-scope transaction or in-scope set of transactions breaches the minimum haircut floors be improved or further clarified?

See Section I.B for a Response to this Question.

Question 61: What are the advantages and disadvantages of the proposed approach to minimum collateral haircuts for in-scope transactions with unregulated financial institutions? How might the proposal change the behavior of banking organizations and their counterparties, including changes in funding practices and potential migration of funding transactions to other counterparties? Commenters are encouraged to provide data and supporting analysis.

See Section I.A for a Response to this Question.

Appendix 3 – Market Risk

This Appendix addresses questions in the Proposal regarding the revised market risk capital framework.

Question 82: The agencies seek comment on the appropriateness of the proposed definition of market risk covered position. What, if any, practical challenges might the proposed definition pose for banking organizations, such as the ability to fair value daily any of the proposed instruments that would be captured by the definition?

See Section I.B, Section I.D, Section I.G and Section I.H for a Response to this Question.

Question 83: The agencies seek comment on the extent to which limiting the proposed definition of market risk covered position to only equity positions in investment funds for which a banking organization has access to the fund's investments limits (as specified in the fund's prospectus, partnership agreement, or similar contract that define the fund's permissible investments) appropriately captures the types of positions that should be subject to regulatory capital requirements under the proposed market risk framework. What types of investment funds, if any, would a banking organization have the ability to value reliably on a daily basis that do not meet this condition?

See Section I.E and Section I.B for a Response to this Question.

Question 84: The agencies seek comment on whether the agencies should consider allowing a banking organization to exclude from the definition of market risk covered position investments in capital instruments or covered debt instruments of financial institutions that have been deducted from tier 1 capital, including investments in publicly-traded common stock of financial institutions, and hedges of these investments that meet the requirements to offset such positions for purposes of determining deductions. What would the benefits and drawbacks be of not providing such an optionality?

A banking organization should have optionality with respect to excluding from the definition of market risk covered position instruments that have been deducted from tier 1 capital.

As a conceptual matter, excluding these instruments from the definition of market risk covered position is sensible to avoid both subtracting these instruments from the numerator and separately calculating an RWA amount for these instruments in the denominator. However, the process for a banking organization to exclude these instruments from the definition of market risk covered positions raises operational challenges. Therefore, a banking organization should be permitted, but not required, to exclude from the definition of market risk covered position instruments that have been deducted from tier 1 capital.

Question 85: For the purposes of determining whether certain positions are within the definition of market risk covered position, is the proposed definition of net short risk position appropriate, and why? What, if any, alternative measures should the agencies consider to identify net short risk positions and why would these be more appropriate?

See Section I.D for a Response to this Question.

Question 86: The agencies seek comment on whether the proposed $20 million threshold is an appropriate measure for identifying significant net short risk exposures that warrant capitalization under the market risk framework. What alternative thresholds or methods should the agencies consider for identifying significant net short risk positions, and why would these alternatives be more appropriate than the proposed $20 million threshold?

See Section I.D for a Response to this Question. Net short risk positions should not be subject to market risk capital requirements.

Question 87: What, if any, challenges might banking organizations face in calculating the market risk capital requirement for net short risk positions? In particular, what, if any, alternatives to the total commitment for loans should the agencies consider using to calculate notional amount—for example, delta notional values rather than notional amount, present value, sensitivities—and why would any such alternatives be a better metric? Please provide specific details on the mechanics of and rationale for any suggested methodology. In addition, which, if any, of the items to be included in a banking organization's net short credit or equity risk position may present operational difficulties and what is the nature of such difficulties? How could such concerns be mitigated?

See Section I.D for a Response to this Question.

Question 88: The agencies seek comment on whether to modify the exclusion for debt instruments for which a banking organization has elected to apply the fair value option that are used for asset and liability management purposes. Would such an exclusion be overly restrictive and, if so, why and how should the exclusion be expanded? Please specify the types and amounts of debt instruments for which banking organizations apply the fair value option that should be covered under this exclusion, and the capital implications of expanding the exclusion relative to the proposal.

See Section I.H for a Response to this Question.

Question 89: The agencies seek comment on whether to modify the criteria of including external CVA hedges in the scope of market risk covered position. What are the benefits and drawbacks of requiring a banking organization to include ineligible external CVA hedges in the market risk capital requirements, provided a banking organization has effective risk management and an effective hedging program?

See Section VI.D.1 for a Response to this Question.

Question 90: The agencies seek comment on any operational challenges of the proposed internal risk transfer framework, in particular any potential difficulties related to internal risk transfers executed before implementation of the proposed market risk capital rule. What is the nature of such difficulties and how could they be mitigated?

See Section I.B, Section I.C, Section VI.D.1 and Section VI.G for a Response to this Question.

Question 92: The agencies seek comment on the appropriateness of the proposed eligibility requirements for a banking unit to recognize the risk mitigation benefit of an eligible internal

risk transfer of credit risk. What, if any, additional requirements or other modifications should the agencies consider, and why?

See Section I.C for a Response to this Question.

Question 93: What, if any, operational burden might the proposed exclusion for the credit risk segment of internal risk transfers pose for banking organizations? What, if any, alternatives should the agencies consider to appropriately exclude the types of positions that should be captured under subpart D or E of the capital rule, but would impose less operational burden relative to the proposal?

See Section I.C for a Response to this Question.

Question 94: The agencies seek comment on subjecting the internal risk transfers of interest rate risk to the market risk capital requirements on a standalone basis. What are the benefits and costs associated with this requirement?

The final rule should clarify whether only the interest rate risk arising from an internal risk transfer of interest rate risk would be subject to market risk capital requirements on a standalone basis. Any interest rate transaction could have foreign exchange risks, which would be subject to market risk capital requirements with respect to the overall portfolio but should not factor into the standalone calculation for internal risk transfers of interest rate risk.

The final rule also should specify that, with respect to foreign exchange transactions with material interest rate risk (including cross-currency basis swaps), a banking organization may conduct internal risk transfers of interest rate risk using dedicated notional desks. In these circumstances, only the interest rate component of the transaction should be subject to the standalone treatment for internal risk transfers of interest rate risk, whereas the foreign exchange risk would be part of the overall calculation of market risk capital requirements for the portfolio.

Question 95: The agencies seek comment on the matching external transaction requirements for internal transfer of CVA risk. Should such external matching transactions be subject to additional requirements, such as those applicable to external hedges of credit risk, and if so, why?

See Section VI.G for a Response to this Question.

Question 96: The agencies seek comment on limiting an eligible internal risk transfer of CVA risk to only internal transactions for which the external transaction perfectly offsets the internal risk transfer. What, if any, challenges might this requirement pose and what should the agencies consider to mitigate such challenges?

See Section VI.G for a Response to this Question.

Question 97: The agencies seek comment on the proposed requirement that a banking organization's trading desk execute a matching transaction with a third party if the internal risk transfer of CVA risk is subject to curvature risk, default risk, or the residual risk add-on? What other risk mitigation techniques would the banking organization implement?

See Section VI.G for a Response to this Question.

Question 98: The agencies seek comment on the proposed documentation requirements for an internal risk transfer of credit risk, interest rate risk, and CVA risk to qualify as an eligible internal risk transfer. What, if any, alternatives should the agencies consider that would appropriately capture the types of positions that should be recognized under subpart D or E of the capital rule?

See Section VI.G for a Response to this Question.

Question 99: What, if any, changes should the agencies consider making to the definition of a trading desk and why? Are there any other key factors that banking organizations typically use to define trading desks for business purposes that the agencies should consider including in the trading desk definition to clarify the designation of trading desks for purposes of the market risk capital framework?

See Section I.E for a Response to this Question.

Question 101: What, if any, additional requirements should apply to notional trading desks to clarify the level at which market risk capital requirements must be calculated? What, if any, additional types of positions should be assigned to the notional trading desk and why?

The Associations do not support additional requirements with respect to notional trading desks at this time, absent an opportunity for the Associations and their members to evaluate and analyze alternative requirements and related effects on regulatory capital calculations. See Section I.E for a discussion of the Volcker Rule.

Question 102: The agencies seek comment on the benefits and drawbacks of requiring trading desks that hold an insignificant amount of securitization positions and correlation trading positions to exclude from the internal models approach such positions and any related hedges, if applicable, in order for such desks to request approval to calculate market risk capital requirements under the models-based for market risk. Commenters are encouraged to provide data to support their responses.

The Proposal would permit a trading desk with *de minimis* amounts of securitization positions and CTP positions to qualify as model-eligible trading desks[338] The Associations support these proposed provisions.

Additionally, with respect to backtesting and PLA testing, the Proposal would include, with prior approval, securitization positions or CTPs.[339] The Associations support the inclusion of securitization positions and CTPs for purposes of backtesting and PLA testing, subject to the Associations' recommendations regarding the PLA test framework in Section I.D.

[338] § _.212(b)(1)(iii).

[339] § _.212(b)(1)(iii)(C).

The Associations also generally support the flexibility provided in the Proposal given the omission of the requirement in the Basel Framework to provide multiple options for a banking organization to obtain initial internal model approval, including when a banking organization does not have 250 business days of back-testing and PLA testing.[340] The Associations support permitting a trading desk to use FRTB-IMA without considering the materiality of the trading desk.

Question 103: The agencies seek comment on all aspects of the models-based measure for market risk calculation, including the capital requirement for instances where the capital requirement under the internal models approach for model-eligible desks exceeds the amount required for such desks under the standardized approach. What would be the benefits or drawbacks of capping the total capital requirement under the models-based measure for market risk at that required for all trading desks under the standardized approach?

See Section I.F for a Response to this Question.

Question 104: The fair value for derivative positions may materially underestimate the exposure since the fair value of derivatives is generally lower than the derivatives' potential exposure (for example, fair value of a derivative swap contract is generally zero at origination). Is the fallback capital requirement based on the absolute fair value of the derivative positions appropriate? What could be alternative methodologies for the fallback capital requirements for derivatives (for example, the absolute value of the adjusted notional amount or the effective notional amount of derivatives as defined in the standardized approach for counterparty credit risk (SA-CCR)? What, if any, alternative techniques would more appropriately measure the market risk associated with market risk covered positions for which the standardized approach cannot be applied?

See Section I.I for a Response to this Question.

Question 105: What, if any, operational challenges could the proposed capital add-on calculation pose? What, if any, changes should the agencies consider making to the proposed exceptions to the capital add-on, such as to address additional circumstances in which the capital add-ons for re-designations should not apply, and why?

See Section I.D and Section I.F for a Response to this Question.

Question 106: The agencies seek comment on the sensitivities-based method for market risk. To what extent does the sensitivities-based method appropriately capture the risks of positions subject to the market risk capital requirement? What additional features, adjustments (such as to the treatment of diversification of risks), or alternative methodology could the sensitivities-based method include to reflect these risks more appropriately and why? Commenters are encouraged to provide supporting data.

See Section I.D for a Response to this Question.

[340] § _.212(b)(2).

Question 107: The agencies seek comment on the appropriateness of requiring banking organizations with material exposure to emerging market currencies to construct distinct onshore and offshore curves. What, if any, operational burden may arise from such requirement and why?

See Section I.M for a Response to this Question.

Question 108: What, if any, risk factors would better serve to appropriately capture the delta sensitivity for positions within the commodity risk class and why?

See Section I.R and Section I.S for a Response to this Question.

Question 109: As the pricing conventions for certain products (for example, callable and puttable bonds) do not explicitly use an implied volatility, the agencies seek comment on the merits of allowing banking organizations to ignore the optionality of callable and puttable bonds that are priced using yield-to-maturity of the instrument if the option is not exercised relative to the merits of specifying a value for implied volatility (for example, 35 percent) to be used in calculating the vega capital requirement for credit spread risk positions when the implied volatility cannot be measured or is not readily available in the market. What are the benefits and drawbacks of specifying a value for the implied volatility for such products and what should the specified value be set to and why? What, if any, alternative approaches would better serve to appropriately capture the vega sensitivity for positions within the credit spread risk class when the implied volatility is not available?

See Section I.O for a Response to this Question.

Question 110: The agencies solicit comment on the appropriateness of relying on a banking organization's internal pricing methods for determining the maturity and strike price of positions without a stated strike price or with multiple strike prices. What, if any, alternative approaches (such as using the average maturity of options with multiple exercise dates) would better serve to promote consistency and comparability in risk-based capital requirements across banking organizations? What are the benefits and drawbacks of such alternatives compared to the proposed reliance on the internal pricing models of banking organizations?

The Associations do not support alternative approaches at this time, absent an opportunity for the Associations and their members to evaluate and analyze the alternative approaches and related effects on regulatory capital calculations.

Question 112: The agencies seek comment on the appropriateness of adding the sub-speculative grade category for non-securitizations and for correlation trading positions. What, if any, operational challenges might the proposed bucketing structure pose for banking organizations and why? What, if any, alternatives should the agencies consider to better capture the risk of these positions?

The Associations do not support alternatives at this time, absent an opportunity for the Associations and their members to evaluate and analyze alternatives and related effects on regulatory capital calculations.

Question 113: The agencies seek comment on the risk weight for covered bonds. What, if any, alternative approaches would better serve to differentiate the credit quality of highly rated covered bonds without referring to credit ratings and why?

See Section I.G for a Response to this Question.

Question 114: The agencies seek comment on whether the proposed definitions for each sector bucket appropriately capture the characteristics to distinguish between the categories of residential mortgage-backed securities. What would be the benefits and drawbacks of using the definition of qualified residential mortgage in the credit risk retention rule? What, if any, alternative approaches should the agencies consider to more appropriately distinguish between the categories of residential mortgage-backed securities?

The Associations do not support alternative approaches with respect to the categories of residential mortgage-backed securities at this time, absent an opportunity for the Associations and their members to evaluate and analyze alternative definitions and related effects on regulatory capital calculations.

Question 115: The agencies seek comment on whether the proposed sector bucket definitions for residential mortgage-backed securities are sufficiently clear. What, if any, additional criteria should the agencies consider to define "primarily" in the context of residential mortgage-backed securities (for example, quantitative limits or other thresholds) and what are the associated benefits and drawbacks of doing so?

The Associations do not support additional criteria at this time, absent an opportunity for the Associations and their members to evaluate and analyze alternative requirements and related effects on regulatory capital calculations.

Question 117: What, if any, other sector buckets require additional clarification, and why?

See Section I.I and Section I.K for a Response to this Question.

Question 118: The agencies solicit comment on the proposed definition of liquid market economy. Specifically, would the proposed criteria sufficiently differentiate between economies that have liquid and deep equity markets? What, if any, alternative criteria should the agencies consider and why? What, if any, of the proposed criteria should the agencies consider eliminating and why?

See Section I.Q for a Response to this Question.

Question 119: The agencies solicit comment related to the proposed risk bucket structure for equity risk. What, if any, other relationships should the agencies consider for highly correlated risks among different equity types that are currently in different risk buckets and why? Please describe the historical correlations between such equities, and historical price shocks for purposes of assigning the appropriate risk weight.

See Section I.I and Section I.Q for a Response to this Question.

Question 120: The agencies solicit comment related to the proposed risk bucket structure and risk weights for commodities. What, if any, other relationships should the agencies consider for highly correlated risks among different commodity types that are currently in different risk buckets and why? Please describe the historical correlations between such commodities, and historical price shocks for purposes of assigning the appropriate risk weight.

See Section I.R and Section I.S for a Response to this Question.

Question 121: The agencies solicit comment on the risk bucket for energy – carbon trading. To what extent is the proposed 60 percent risk weight reflective of the risk in carbon trading under stressed conditions?

See Section I.S for a Response to this Question.

Question 122: For securitization positions non-CTP, the agencies seek comments on requiring banking organizations to apply a 100 percent delta correlation parameter for cases where the securitization positions in the same bucket that are related to the same securitization tranche with more than 80 percent overlap in notional terms. What, if any, alternative criteria should the agencies consider for application of the 100 percent correlation parameter and why? For example, what are benefits and drawbacks of allowing a banking organization to apply a 100 percent delta correlation parameter if the securitization tranches can offset all or substantially all of the price risk of the position? What challenges exist, if any, with respect to banking organizations' ability to implement such criteria? What quantitative measure can be used to implement this criteria? How would a market stress impact the basis risk between securitization tranches within the same risk buckets, and the ability to adequately hedge all or substantially all of the price risk using similar but unrelated securitized tranches?

The Associations do not support alternative criteria for applying the 100 percent delta correlation parameter at this time, absent an opportunity for the Associations and their members to evaluate and analyze alternative criteria and related effects on regulatory capital calculations.

Question 123: The agencies request comment on the appropriateness of allowing banking organizations to apply a higher intra-bucket correlation parameter of 99.5 percent to 99.9 percent for energy – carbon trading. What would be the benefits and drawbacks of such a higher correlation parameter relative to the correlation parameter of 40 percent currently contained in the proposal?

See Section I.S for a Response to this Question.

Question 125: The agencies request comment on whether the proposed formula for calculating gross default exposure appropriately captures the gross default risk for all types of non-securitization debt and equity instruments. What, if any, positions exist for which the formula cannot be applied? What is the nature of such difficulties and how could such concerns be mitigated? In particular, the agencies seek comment on whether the proposed formula appropriately captures the gross default risk of convertible instruments.

See Section I.J for a Response to this Question.

Question 126: The agencies request comment on the appropriateness of the proposed LGD rates for non-securitization debt or equity positions. What, if any, changes should the agencies consider making to the categories to appropriately differentiate the LGD rates for various instruments or for instruments with different seniority (for example, senior versus non-senior)?

See Section I.K for a Response to this Question.

Question 127: The agencies request comment on the appropriateness of allowing banking organizations to net the gross default exposures of derivative contracts and the underlying positions that are deliverable to satisfy the derivative contract. What, if any, additional criteria should the agencies consider to further clarify the netting of gross default exposures and why? What, if any, positions should the agencies consider allowing to net that would not exhibit default risk? For example, what are the advantages and disadvantages of the agencies allowing Uniform Mortgage Backed Securities that are issued by two different obligors to fully offset, even though such a treatment would not eliminate the default risk of either obligor independently?

See Section I.A for a Response to this Question.

Question 128: The agencies seek comment on the appropriateness of the proposed treatment of GSE exposures. What, if any, alternative methods should the agencies consider to measure more appropriately the default risk associated with such positions? What would be the benefits and drawbacks of such alternatives compared to the proposed treatment?

See Section I.C for a Response to this Question.

Question 129: The agencies seek comment on the appropriateness of not allowing banking organizations to recognize any offsetting benefit for market risk covered positions where the obligor is not identified. What, if any, alternative methods should the agencies consider to measure more appropriately the default risk associated with such positions? What would be the benefits and drawbacks of such alternatives compared to the proposed treatment?

The Associations do not support alternative methods to recognize offsetting benefits where the obligor is not identified at this time, absent an opportunity for the Associations and their members to evaluate and analyze alternative methods and related effects on regulatory capital calculations.

Question 130: The agencies solicit comment on the appropriateness of the proposed risk weights and granularity in Table 1 to § _.210. What, if any, alternative approaches should the agencies consider for assigning risk weights that would be consistent with the prohibition on the use of credit ratings? Commenters are encouraged to provide specific details on the mechanics of and rationale for any suggested methodology.

See Section I.F for a Response to this Question.

Question 131: The agencies seek comment on the proposed netting and decomposition criteria for calculating the net default exposure for securitization positions non-CTP. What, if any, alternative non-model-based methodologies should the agencies consider that would

conservatively recognize some hedging benefits but still capture the basis risk between non-identical positions?

The Associations do not support alternative non-model-based methodologies at this time, absent an opportunity for the Associations and their members to evaluate and analyze alternative methodologies and related effects on regulatory capital calculations.

Question 133: The agencies seek comment on all aspects of the proposed residual risk add-on. Specifically, the agencies request comment on whether there are alternative methods to identify more precisely exotic exposures and other residual risks for which the residual risk capital requirement is appropriate. What, if any, additional instruments and off-setting positions should be excluded from the residual risk add-on and why? What, if any, quantitative measures should the agencies consider to identify or distinguish residual risks and why?

See Section I.H for a Response to this Question.

Question 135: The agencies seek comment on the proposed threshold of 75 percent for assigning a credit or equity index to the corresponding sector or the investment grade indices bucket. What would be the benefits and drawbacks of the proposed threshold? What, if any, alternative thresholds should the agencies consider that would more appropriately measure the majority of constituents in listed and well-diversified credit and equity indices?

See Section I.T for a Response to this Question.

Question 136: The agencies seek comment on all aspects of the proposed treatment of index instruments and multi-underlying options under the standardized measure for market risk. Specifically, the agencies request comment on any potential challenges from requiring the look-through approach for all index instruments and multi-underlying options that are non-securitization debt or equity positions for the standardized default risk capital calculation. What, if any, alternative methods should the agencies consider that would more appropriately measure the default risk associated with such positions? What would be the benefits and drawbacks of such alternatives compared to the proposed look through requirement?

See Section I.E.2 for a Response to this Question.

Question 137: The agencies seek comment on the internal models approach for market risk. To what extent does the approach appropriately capture the risks of positions subject to the market risk capital requirement? What additional features, adjustments (such as to the treatment of diversification of risks), or alternative methodology could the approach include to reflect these risks more appropriately and why? Commenters are encouraged to provide supporting data.

See Section I.U for a Response to this Question.

Question 138: The agencies request comment on the appropriateness of the proposed requirements for the risk factors included in the internal models approach. What, if any, alternative requirements should the agencies consider, such as requiring risk factor coverage to align with the front office models, and why? Specifically, please describe any operational challenges and impact on banking organizations' minimum capital requirements that requiring

the expected shortfall model to align with the front-office models would create relative to the proposal.

See Section I.N for a Response to this Question.

Question 139: What, if any, other information should the agencies consider in defining a real price that would better demonstrate the market liquidity for risk factors, such as valuations provided by an exchange or central counterparty or valuations of individual derivative contracts for the purpose of exchanging variation margin? What, if any, conditions or limitations should the agencies consider applying to help ensure the validity of such information, such as only allowing information related to individual derivative transactions to qualify as a real price and not information provided on a pooled basis?

See Section I.P for a Response to this Question.

Question 140: The agencies request comment on what, if any, modifications to the proposed bucketing structure should be considered to better reflect the risk factors used to price certain classes of products. What would be the benefits or drawbacks of such alternatives compared to the proposed bucketing structure?

The Associations do not support additional modifications to the proposed bucketing structure at this time, absent an opportunity for the Associations and their members to evaluate and analyze these modifications and related effects on regulatory capital calculations.

Question 141: What, if any, restrictions on the minimum observation period for new issuances should the agencies consider and why?

The Associations do not support restrictions on the minimum observation period for new issuances, absent an opportunity for the Associations and their members to evaluate and analyze these restrictions and related effects on regulatory capital calculations.

Question 143: The agencies request comment on the appropriateness of the proposed data quality requirements for modellable risk factors. What, if any, challenges, might the proposed requirements pose for banking organizations? What, if any, additional requirements should the agencies consider to help ensure the data used to calculate the IMCC appropriately capture the potential losses arising from modellable risk factors?

See Section I.N and Section I.O for a Response to this Question.

Question 146: The agencies request comment on the operational burden of requiring banking organizations to model the idiosyncratic risk of an issuer that satisfies the risk factor eligibility test and data quality requirements using data inputs for that issuer. What, if any, alternative approaches should the agencies consider such as allowing banking organizations to use data from similar names that would appropriately capture the idiosyncratic risk of the issuer? What would be the benefits and drawbacks of such alternatives relative to the proposal?

See Section I.N for a Response to this Question.

Question 148: The agencies request comment on the appropriateness of requiring the election of either the direct or the indirect approach to apply to the entire portfolio of modellable risk factors for market risk covered positions on model-eligible trading desks. What, if any, alternatives should the agencies consider that would enable banking organizations' expected shortfall models to more accurately measure potential losses under the selected stress period, such as allowing banking organizations to make this election at the level of the trading desk, risk class, or risk factor? If this election is allowed at a more granular level, how should the agencies consider addressing the operational challenges associated with aggregating the various direct and indirect expected shortfall measures into a single entity-wide expected shortfall measure? What would be the benefits and drawbacks of such alternatives compared to the proposed entity-wide election?

See Section I.Q and Section I.R for a Response to this Question.

Question 149: What, if any, risk factors exist that would not be captured by the proposal for which the agencies should consider designating a specific liquidity horizon and why?

The Associations do not support including additional risk factors at this time, absent an opportunity for the Associations and their members to evaluate and analyze these additional risk factors and related effects on regulatory capital calculations.

Question 150: The agencies request comment on the appropriateness of assigning a liquidity horizon for multi-underlying instruments based on the weighted average of the liquidity horizons for the risk factors corresponding to the underlying constituents and the respective weighting of each within the index. What, if any, alternative methodologies should the agencies consider, such as assigning the liquidity horizon for credit and equity indices based on the longest liquidity horizon applicable to the risk factors corresponding to the underlying constituents? What would be the benefits and drawbacks of such alternatives compared to the proposal? Commenters are encouraged to provide data to support their responses.

See Section I.M for a Response to this Question.

Question 151: The agencies request comment on the appropriateness of requiring banking organizations to use the next longer liquidity horizon for instruments with a maturity shorter than the respective liquidity horizon assigned to the risk factor. What, if any, operational challenges might this pose for banking organizations? How could such concerns be mitigated while still ensuring consistency and comparability in regulatory capital requirements across banking organizations?

See Section I.K for a Response to this Question.

Question 152: The agencies seek comment on the appropriateness of requiring banking organizations to use the same reduced set of risk factors to both identify the appropriate stress period and calculate the IMCCs. To what extent does the proposed approach provide banking organizations sufficient flexibility to appropriately capture the risk factors that may be present in some, but not all stress periods? What, if any, alternative approaches should the agencies consider that would better serve to capture such risk factors relative to the proposal?

See Section I.Q and Section I.R for a Response to this Question.

Question 153: The agencies seek comment on the treatment of non-modellable risk factors. Specifically, is the treatment for non-modellable risk factors appropriate and commensurate with their risks? What other treatments should the agencies consider and why? Should the agencies consider scaling the resulting aggregate SES capital requirement for non-modellable risk factors by a multiplier to better reflect the risk profile of these risk factors and, if so, how should that multiplier be calibrated and why?

See Section I.A, Section I.B and Section I.C for a Response to this Question.

Question 154: What, if any, alternative techniques should the agencies consider that would render the capital multiplier a more appropriate measure of the robustness of a banking organization's internal models? What are the benefits and drawbacks of such alternatives compared to the proposed calculation for the aggregate trading portfolio back-testing capital multiplier?

See Section I.I for a Response to this Question.

Question 155: The agencies seek comment on all aspects of the PLA test metrics. What, if any, modifications should the agencies consider that would enable the PLA tests to more appropriately measure the robustness of a banking organization's internal models?

See Section I.D for a Response to this Question.

Question 156: The agencies seek comment on the appropriateness of allowing banking organizations to align the risk input data between the internal risk management models and the front-office models. What other instances, if any, should the agencies consider to ensure accurate and consistent assessment of the profit and losses produced by the internal risk management models with those produced by the front office models for a particular model-eligible trading desk?

See Section I.S for a Response to this Question.

Question 157: The agencies request comment on the benefits and drawbacks of allowing banking organizations, with regulatory approval, to include non-modellable risk factors for purposes of the PLA tests. Should non-modellable risk factors be excluded from the PLA tests? Why or why not? What, if any, further conditions should the agencies consider including to appropriately limit the inclusion of non-modellable risk factors for purposes of the PLA tests? Commenters are encouraged to provide data to support their responses.

The Associations do not support additional conditions at this time, absent an opportunity for the Associations and their members to evaluate and analyze the additional conditions and related effects on regulatory capital calculations.

Question 158: Should non-modellable risk factors be excluded from the proposed back-testing requirements? Why or why not? What, if any, further conditions should the agencies consider including to limit appropriately the inclusion of non-modellable risk factors for purposes of the

back-testing requirements? Commenters are encouraged to provide data to support their responses.

The Associations support permitting a banking organization to demonstrate that one or more NMRFs caused a relevant loss and that the capital requirement for the NMRF exceeds the difference between the VaR-based measure and the actual or hypothetical loss for that business day.[341]

Question 159: The agencies invite comment on what, if any, challenges requiring banking organizations to directly calculate the internally modelled capital requirement for modellable risk factors using a 10-day liquidity horizon for the purposes of the daily expected shortfall-based measure for modellable risk factors could pose and a 1-day VaR for the purposes of back-testing could pose. What, if any, alternative methodologies should the agencies consider?

See Section I.I and Section I.J for a Response to this Question.

Question 160: The agencies seek comment on whether a banking organization's ability under the proposal to treat an equity position in an investment fund as an index position when the investment fund closely tracks an index benchmark provides sufficient specificity to help ensure consistent application across banking organizations. To what extent would a specific quantitative measure more appropriately capture the types of positions that should be treated as index positions? What, if any, alternatives should the agencies consider (such as specifying an absolute value of one percent) to better capture the types of positions whose risks would more appropriately be captured by the proposed market risk capital requirements for index positions and why? Commenters are encouraged to provide specific details on the mechanics, capital implications and rationale for any suggested methodology.

See Section I.E.1 for a Response to this Question.

Question 161: The agencies seek comment on requiring banking organizations to calculate the residual risk add-on for equity positions in investment funds, if, based on its mandate, the fund would invest in the types of exposures that would be subject to the residual risk add-on to the maximum extent permitted under the mandate. What, if any, alternatives – such as allowing banking organizations to use the historical risk characteristics of the fund – should the agencies consider to better capture the residual risks of such positions? Commenters are encouraged to provide specific details on the mechanics, capital implications and rationale for any suggested methodology.

The Associations do not support alternative methodologies at this time, absent an opportunity for the Associations and their members to evaluate and analyze the alternative methodologies and related effects on regulatory capital calculations.

Question 162: What would be the advantages and drawbacks of allowing banking organizations to decompose equity positions in investment funds into the underlying holdings of the fund or based on the hypothetical portfolio, for purposes of calculating capital requirements under the

[341] § _.204(g)(1)(iii)(B).

internal models approach? Please provide specific details on the mechanics, capital implications and rationale for any suggested methodology, in particular the extent to which the proposed back-testing and PLA requirements would help ensure appropriate risk capture for positions in which the banking organization is only able to perform a look through on a quarterly basis.

See Section I.L for a Response to this Question.

Appendix 4 – Credit Valuation Adjustment Risk

This Appendix addresses questions in the Proposal relating to the proposed revised CVA risk framework.

Question 163: The agencies seek comments on the proposed interpretation of region for the purposes of BA-CVA. Would limiting a region to a country or a territorial entity pose any challenges for hedge recognition under BA-CVA? What, if any, other criteria or interpretations should the agencies consider and why?

See Section VI.D.2 for a Response to this Question.

Question 164: The agencies seek comments on the appropriateness of the proposed risk weights of Table 1 to § _.222 for financials, including government-backed financials. What, if any, alternative risk weights should the agencies consider? Please provide specific details and supporting evidence on the alternative risk weights.

See Section VI.C for a Response to this Question.

Question 165: The agencies seek comments on the appropriateness of treating the counterparty credit risks of public-sector entities and the GSEs in the same way as those of government-backed non-financials, education, and public administration. What, if any, alternatives should the agencies consider to more appropriately capture the counterparty credit risk for such entities?

See Section VI.J for a Response to this Question.

Question 166: The agencies seek comments on the appropriateness of applying a 0.65 calibration factor in the formula setting the capital requirement under the BA-CVA to ensure that CVA risk capital requirements appropriately reflect CVA risk. What other level of the calibration should the agencies consider and why?

The calibration factor should not be higher than 0.65. The ratio between BA-CVA and SA-CVA capital requirements for the same netting sets would result in a ratio of 1.67[342], which indicates that a calibration factor lower than 0.65 would be justifiable.

Question 167: The agencies seek comment on using the counterparty credit risk framework to calculate the exposure amount for standalone CVA counterparty-level capital requirement. Does the CVA capital requirement pose particular issues in the case of nonfinancial counterparties? If so, what modifications should the agencies consider to mitigate such issues?

See Section VI.H for a Response to this Question.

[342] See Appendix 8 – Quantitative Impact Study Results, Index TB_87.

Question 168: The agencies seek comment on the appropriateness of the proposed risk buckets, risk weights and correlations for the exposure-related risk classes. What, if any, alternative risk bucketing structures, risk weights, or correlations should the agencies consider and why?

See Section VI.U for a Response to this Question.

Question 169: To what extent are the proposed risk buckets, risk weights, and correlations for counterparty credit spread risk class appropriate? What, if any, alternative risk bucketing structures, risk weights, or correlations should the agencies consider and why?

See Section VI.J for a Response to this Question.

Question 170: To what extent are the proposed intra- and inter-bucket aggregation methodology appropriate? What, if any, alternative methodologies should the agencies consider and why?

See Section VI.D.2 for a Response to this Question.

Question 171: What, if any, alternative methods should the agencies consider for recognizing diversification across risk classes in the calculation of the SA-CVA, and why?

See Section VI.E for a Response to this Question.

Question 172: To what extent is the default value of one for the multiplier appropriate or should the agencies consider a higher or lower default value for the multiplier and why?

The Associations do not support a higher or lower default value at this time, absent an opportunity for the Associations and their members to evaluate and analyze the alternative default value and related effects on regulatory capital calculations.

Appendix 5 – General Questions

This Appendix addresses questions in the Proposal with respect to the interrelationship between the proposal and other prudential regulations.

Question 1: The Board invites comment on the interaction of the revisions under the proposal with other existing rules and with the other notice of proposed rulemaking. In particular, comment is invited on the impact of the proposal on the single-counterparty credit limit framework. What are the advantages and disadvantages of the proposed approach? Which alternatives, if any, should the Board consider and why?

See Section I.I for a Response to this Question.

Question 7: The Board invites comment on the appropriate level of risk capture for the risk-weighted assets framework and the stress capital buffer requirement, both for their respective roles in the capital framework and for their joint determination of overall capital requirements. How should the Board balance considerations of overall capital requirements with the distinct roles of minimum requirements and buffer requirements? What adjustments, if any, to either piece of the framework should the Board consider? Which, if any, specific portfolios or exposure classes merit particular attention and why?

It is important to recognize that banking organizations consider the full dollar amount of capital required with respect to particular business lines and products. From this perspective, the required dollar amount of capital is a product of both the quantum of RWA and the capital ratio requirements, including both regulatory minimum capital requirements, as well as the SCB and other applicable buffers, such as the GSIB surcharge or the enhanced supplementary leverage ratio buffer requirement.[343]

In this context, applying the SCB requirement to the ERBA capital stack would lead to material overcalibration of the risk-based capital requirement for trading activities in light of the material overlaps in risk capture by the SCB and ERBA.

- First, the risk of losses arising from pricing changes, changes in counterparty credit spreads and counterparty defaults are capitalized under their respective components of ERBA. These risks are separately captured by the GMS and large counterparty default components of the supervisory stress tests. The magnitude with respect to risk factor shock sizes and constraints regarding recognition of diversification used to estimate losses under ERBA and the GMS are of similar severity.
- Second, losses arising from operational risk are capitalized under the operational risk components of ERBA. A recent study has shown that, "[w]hen comparing historical loss rates to capital requirements, maximum two-year average loss rates…are 48% for

[343] See, e.g., Basel Committee, *Buffer usability and cyclicality in the Basel framework*, p. 4 (Oct. 2022), *available at* https://www.bis.org/bcbs/publ/d542.pdf (noting that "several studies, including the July 2021 BCBS report and a report published by the FSB in October 21, have found some indications of hesitancy by banks to dip into their capital buffers…not[ing] that the potential reluctance to use capital buffers may reflect banks' uncertainty about future losses, capital distribution constraints or the market stigma that a bank might face if it were to operate within its buffers.").

operational risk, showing that operational risk is capitalized substantially more relative to historical losses."[344] These losses are captured separately by the pre-provision net revenue component of the supervisory stress tests. The same point also applies to CVA which becomes an additional RWA component under ERBA, as discussed in Section J.VII.

- Third, there are numerous examples where aggregate capital requirements from both the capital rules and the SCB framework can exceed maximum loss. For example, over 15% of all securitization issuances in 2023 would be subject to aggregate capital requirement in excess of maximum economic loss taking into account capital charges under the FRTB and SCB[345]. In these instances, the banking organization would be better off if the full value of securitization holdings were reduced to zero, as that would increase capital ratios for the banking organization. This dynamic would only be exacerbated by the increased capital requirements contemplated in ERBA (most specifically within FRTB and the revised securitization framework) and the application of the SCB to ERBA.

To ameliorate the degree of overcalibration as a result of the overlap, the Associations believe the Agencies should either:

- Apply the SCB only to the U.S. standardized approach, but not the ERBA stack, or
- Review the overall calibration of capital markets related activities in the aggregate across FRTB, CVA, and SCB—particularly the GMS component—and make appropriate adjustments, including: (1) subtracting losses capitalized under FRTB and CVA from GMS loss estimates; (2) excluding private equity from the GMS loss estimates; and (3) where appropriate (particularly for securitization exposures), allow a bank to cap the all-in capital requirement for of a single position across SCB and ERBA at its maximum loss.

Question 175: What modifications, if any, should the Board consider to this proposal or to other Board rules indirectly affected by this proposal?

See Section I.E.VIII for a Response to this Question.

Question 176: What modifications, if any, should the Board consider to this proposal due to the Board's separate GSIB proposal and why?

See Section I.E.VIII for a Response to this Question.

[344] PwC, *Basel III endgame: Outsized operational risk impact*, available at https://explore.pwc.com/baseliiiendgame-operational-risk.

[345] This estimate is based on data available in Bloomberg, combined with the relevant GMS shocks applicable for the 2023 supervisory stress tests. All 2023 securitization issuances are available in Bloomberg. Bloomberg also has a built-in SSFA calculator. Finally, the GMS shock in the supervisory stress test is calibrated based on vintage, credit quality, and underlying asset class, all of which is also available on Bloomberg.

Appendix 6 – Other Considerations

This Appendix includes other considerations in connection with the Proposal.

Liquidity Horizons

The Associations note that there is a discrepancy in the versions of Table 2 to § _.215 provided in the preamble to the Proposal[346] and the rules text.[347] Specifically, the version of Table 2 to § _.215 in the preamble includes six additional rows (for a total of 12 liquidity horizons) that are not specified in the version of Table 2 to § _.215 in the rules text.

Equity Vega Risk Weights

Table 11 to § _.209 regarding vega risk weights would assign a 77.78 percent risk weight in respect of equity risk for large market cap and indices. On the other hand, § _.225(b)(4)(iii) provides that the vega risk weight for equity risk equals 78 percent for large market cap buckets. These two risk weights should be consistent at 77.78 percent.

The FDIC's deposit insurance assessment framework should be revised to replace the current exposure methodology with SA-CCR for banking organizations that would be required to apply SA-CCR under the Proposal.

In the context of the SA-CCR final rule, the FDIC noted that a "lack of historical data on derivative exposure using SA-CCR makes the FDIC unable to incorporate the SA-CCR methodology into the deposit insurance assessment pricing methodology for highly complex institutions upon the effective date of [SA-CCR]."[348] The FDIC also noted that it "plans to review derivative exposure data reported using SA-CCR, and then consider options for addressing the use of SA-CCR in the deposit insurance assessment system."

Category I and Category II banking organizations were required to implement SA-CCR beginning January 1, 2022. As a result, the FDIC now has almost two full calendar years of historical data regarding calculating derivative exposures under SA-CCR. Accordingly, the FDIC should conduct a separate rulemaking to replace the current exposure methodology with SA-CCR for purposes of determining FDIC deposit insurance assessment charges for banking organizations that would be required to use SA-CCR to calculate counterparty credit risk for derivative contracts under the regulatory capital rules (specifically, under the Proposal, Category I through Category IV banking organizations).

This approach would promote greater coherence in the bank prudential framework by applying consistent methodologies for exposure calculations. This approach would also reduce the operational burden attendant to banking organizations needing to maintain two different exposure calculations, one for purposes of regulatory capital (SA-CCR) and a second for

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346 88 Fed. Reg. at 64,138.

347 88 Fed. Reg. at 64,274.

348 FDIC, Federal Reserve, OCC, Standardized Approach for Calculating the Exposure Amount of Derivative Contracts, 85 Fed. Reg. 4,362, 4,369 (Jan. 24, 2020).

purposes of FDIC deposit insurance assessment charges (current exposure methodology). It also would align with the proposed change to the interconnectedness indicator within the GSIB Surcharge, where the current exposure methodology would be replaced with SA-CCR.[349]

[349] 88 Fed. Reg. at 60,392.

Appendix 7 – Additional Information Regarding Non-Financial Collateral Analysis

The table below lists the time-series tickers used in the analysis of the fair value yield curves used to calculate changes in fair value of hypothetical semiannually paying par bonds over an overlapping 10-day holding period in respect of non-investment grade corporate and sovereign collateral provided in Section I.A:

Table 12: Tickers for Fair Value Yield Curves

Category	Tenor	Ticker
Corporate B	3Y	IGUUI603 BVLI Index
	5Y	IGUUI605 BVLI Index
	10Y	IGUUI610 BVLI Index
Corporate BB	3Y	IGUUC503 BVLI Index
	5Y	IGUUC505 BVLI Index
	10Y	IGUUC510 BVLI Index
Turkey	3Y	BV030850 BVLI Index
	5Y	BV050850 BVLI Index
	10Y	BV100850 BVLI Index
Brazil	3Y	BV030802 BVLI Index
	5Y	BV050802 BVLI Index
	10Y	BV100802 BVLI Index
South Africa	3Y	BV030262 BVLI Index
	5Y	BV050262 BVLI Index
	10Y	BV100262 BVLI Index

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Appendix 8 – Quantitative Impact Study Results

Index	Description	Aggregate Value, Change, or Ratio.	Footnote
TB_01	Total current market risk RWA (current model approval status) (in $Bn)	383	9
TB_01a	Total revised market risk capital requirement (assuming current model approval status) (in $Bn)	661	10
TB_02	Total revised market risk RWA (assuming current model approval status) with mitigating items (in $Bn)	474	11
TB_03	Total ERBA CVA RWA (in $Bn)	217	12
TB_03a	Total ERBA CVA RWA with mitigating items (in $Bn)	167	13
TB_04	Total current SFT RWA (in $Bn)	486	14
TB_04a	Total ERBA SFT RWA (in $Bn)	574	15
TB_05	Total ERBA SFT RWA with mitigating items (in $Bn)	291	16
TB_06	Total current Derivatives CCR RWA (including Default Fund RWA) (in $Bn)	700	17
TB_06a	Total ERBA Derivatives CCR RWA (including Default Fund RWA) (in $Bn)	680	18
TB_07	Total ERBA Derivatives CCR RWA with mitigating items (including Default Fund RWA) (in $Bn)	556	19
TB_08	Total revised market risk RWA for full portfolio under SA (in $Bn)	811	20
TB_08a	Total revised market risk RWA for full portfolio under SA with mitigating items(in $Bn)	552	21
TB_09	Percent change of total revised market risk RWA for full portfolio under SA vs. total current market risk RWA	112%	22
TB_10	Percent change of total revised market risk RWA for full portfolio under SA excluding the impact related to the treatment of GSEs vs. total current market risk RWA	93%	23
TB_11	Percent change of total revised market risk RWA (assuming current model approval status) vs. total current market risk RWA	73%	24
TB_12	Percent change of ERBA SFT RWA vs. current SFT RWA	18%	26
TB_13	Ratio of total revised market risk RWA for full portfolio under SA to total current market risk RWA	2.12	36
TB_14	Ratio of total revised market risk RWA for full portfolio under SA with diversification impacts to total current market risk RWA	1.44	37
TB_15	Revised market risk RWA impact of excluding sovereigns & supranationals in SA-DRC and SBM calculation (in $Bn)	44.7	38
TB_15a	Revised market risk RWA impact of excluding local currency sovereigns from SA-DRC (in $Bn)	35.6	39
TB_16	Revised market risk RWA impact of treating UMBS-eligible and ineligible pools as exposure to the same UMBS obligor in SBM (in $Bn)	70.3	40
TB_17	Revised market risk RWA impact of reducing SBM and LGD rate for municipal bonds (in $Bn)	5.0	41

Index	Description	Aggregate Value, Change, or Ratio.	Footnote
TB_18	Revised market risk RWA impact of reverting 'p' factor to 0.5 in securitization framework (in $Bn)	7.4	42
TB_19	Revised market risk RWA impact of reducing carbon trading risk weights (in $Bn)	5.4	43
TB_20	Revised market risk RWA impact of including ineligible CVA hedge in market risk (in $Bn)	11.1	44
TB_21	Revised market risk RWA impact to CTP SA-DRC by allowing decomposition, non-securitization RWs, non-securitization bucketing, and non-zero recovery	27.8	45
TB_22	Percent change of total revised market risk for introducing an inter risk-class correlation parameter of 0.5 relative to total revised market risk for full portfolio under SA with mitigating items (pre-diversification impact)	14%	46
TB_23	Revised market risk RWA impact of introducing an inter risk-class correlation parameter of 0.5 (in $Bn)	86.4	47
TB_24a	Term-repo style transaction SA-DRC under FRTB market risk approach (including collateral requirement) relative to total ERBA SFT RWA	37.7%	49
TB_24b	Term-repo style transaction SA-DRC under FRTB market risk approach (including collateral requirement) relative to total ERBA SFT RWA with mitigating items	93.9%	49
TB_25	Marginal impact to SBM of excluding sovereign exposures and MDB exposures receiving a 0% risk weight	-3%	54
TB_26	Marginal impact to non-securitization SA-DRC of excluding EM sovereigns receiving a 0% risk weight	-24%	56
TB_27	Marginal impact to non-securitization SA-DRC of excluding sovereigns other than US government securities and supranationals	-3%	57
TB_28	Percent change of revised market risk capital for GSE exposures in the US NPR vs. revised market risk capital for GSE exposures where TBAs and UMBS-eligible deliverable pools are not treated as the same obligor (i.e., the advocacy)	98%	64
TB_29	Percent change of total market risk for introducing an inter risk-class correlation parameter of 0.5 vs. total market risk FRTB-SA without mitigating items	10.7%	65
TB_30	Percent change of revised market risk RWA for CTP (including SA-DRC without decomposition and assuming p = 1) vs. current market risk RWA	195%	67
TB_31	Percent change of revised market risk RWA for CTP (including SA-DRC with decomposition, non-securitization risk weights, non-zero recovery, and non-securitization bucketing for aggregation) vs. current market risk RWA	33%	68
TB_32	Percent change of revised market risk RWA for PSE exposures vs. current market risk RWA	46%	79

Index	Description	Aggregate Value, Change, or Ratio.	Footnote
TB_33	Percent change of revised market risk RWA for PSE exposures (with reduced SBM risk weights for tax-exempt PSE exposures) vs. current market risk RWA	27%	80
TB_34	Percent change of revised SA-DRC RWA for PSE exposures (with LGD changed to 50%) vs. revised SA-DRC RWA	-32%	83
TB_35	Percent change of revised SA-DRC RWA for PSE exposures in the US NPR vs. Basel FRTB SA-DRC RWA	37%	84
TB_36	Percent change of revised market risk RWA for PSE exposures (with reduced SBM risk weights for tax-exempt PSE exposures and LGD changed to 50% for PSE exposures) vs. current market risk RWA	8%	85
TB_37	Percent change of revised market risk RWA for carbon trading (assuming proposed risk weights and without vintage offset) vs. revised market risk RWA (i.e., the US NPR)	-52%	108
TB_38	Percent change of revised market risk RWA for total commodity area (assuming proposed risk weights for carbon trading and without vintage offset) vs. revised market risk RWA (i.e., the US NPR)	-16%	109
TB_39	Ratio of total revised market risk RWA (assuming current model approval status) to total current market risk RWA	1.73	112
TB_40	Ratio of total revised market risk RWA (assuming current model approval status) with combined impact to total current market risk RWA	1.24	113
TB_14	Ratio of total revised market risk RWA under SA with diversification impact to total current market risk RWA	1.44	37
TB_41a	SA-DRC total mitigation (including Sovereigns, CTP, Muni, and Securitization) (in $Bn)	79	115
TB_41b	SA-DRC total mitigation due to diversification (in $Bn)	11	116
TB_42	NMRF RWA reduction by changing rho parameter from 0.6 to 0.25 (in $Bn)	40.1	117
TB_43	IMCC RWA reduction by changing rho parameter from 0.5 to 0.75 (in $Bn)	28	118
TB_44	Percent change to SBM of introducing an inter risk-class correlation parameter of 0.5	-22%	119
TB_45	SBM RWA reduction (assuming current model approval status) by introducing an inter risk-class correlation parameter of 0.5 (in $Bn)	28	120
TB_46	Percent change to non-securitization DRC of using US NPR risk weights versus Basel risk weights	4%	182
TB_47	Ratio of total ERBA SFT RWA to current SFT RWA	1.18	185
TB_48	Ratio of total ERBA SFT RWA with mitigating items to Current SFT RWA	0.60	186
TB_49	Impact of removing SFT minimum haircut floors (in $Bn)	124	187
TB_50	Impact to SFTs of treating broker dealers as banks (in $Bn)	7	188
TB_51	Impact to SFTs of treating highly regulated entities as IG corporates (this would obviate the need to be an issuer of securities) (in $Bn)	16	189

Index	Description	Aggregate Value, Change, or Ratio.	Footnote
TB_52	Impact to SFTs of treating IG corporates as IG corporates even if no publicly traded security is available (this should be applied to all corporates that are NOT highly regulated financial entities) (in $Bn)	28	190
TB_53	Impact to SFTs of aligning short-term risk weights for banks with that of Basel (i.e., all bank exposures <=3 months subject to lower risk weight in Table 2, p. 54 of 1087 in the US NPR) (in $Bn)	7	191
TB_54	Impact to SFTs of other changes (in $Bn)	100	192
TB_55	Percent change to SFTs of removing the minimum haircut floor framework	-26%	202
TB_56	Percent change to SFTs of not including the risk-mitigating benefit of financial collateral received on all SFTs with unregulated FIs for a netting set upon breaching the minimum haircut floor	44%	205
TB_57	Percent change to SFTs of exempting GSE securities from the minimum haircut floor framework	-3%	223
TB_58	Total ERBA CVA RWA (in $Bn)	217	264
TB_59	Ratio of ERBA CVA RWA (with additional FI Buckets, reduced risk weights for carbon trading, exclusion of client cleared leg of client cleared transactions, increased cross-bucket correlation of 70% between buckets 8 and 1-6) to ERBA CVA RWA	0.77	265
TB_60	Percent change to ERBA CVA RWA (with additional FI Buckets, reduced risk weights for carbon trading, exclusion of client cleared leg of client cleared transactions, increased cross-bucket correlation of 70% between buckets 8 and 1-6) vs. ERBA CVA RWA	-23%	266
TB_61	Total ERBA BA-CVA RWA with mitigating items (in $Bn)	50	267
TB_62	Percent change to CVA RWA (using FI granular buckets) vs. ERBA CVA RWA	-19%	268
TB_63	Percent change to CVA RWA (excluding client cleared leg of cleared transactions) vs. ERBA CVA RWA	-9%	269
TB_64	Percent change to CVA RWA (using 70% cross-bucket correlation for CCS risk between index bucket 8 and buckets 1 - 6) vs. ERBA CVA RWA	-8%	270
TB_65	Percent change of ERBA CVA RWA vs. current CVA RWA	-13%	273
TB_63	Percent change to CVA RWA (excluding client cleared leg of cleared transactions) vs. ERBA CVA RWA	-9%	284
TB_66	Percent change to BA-CVA (using FI granular buckets) vs. ERBA CVA RWA	-14%	286
TB_67	Percent change to revised market risk RWA of including ineligible CVA hedges in market risk	3%	291
TB_68	Percent change to SA-CVA of using 70% cross-bucket correlation for CCS between bucket 8 and buckets 1-6 instead of the 45% correlation	-13%	296
TB_69	Ratio of total ERBA Derivatives CCR RWA to current Derivatives CCR RWA	0.97	307
TB_70	Impact to Derivatives CCR RWA of treating broker dealers as banks (in $Bn)	8	308

Index	Description	Aggregate Value, Change, or Ratio.	Footnote
TB_71	Impact to Derivatives CCR RWA of treating highly regulated entities as IG corporates (this would obviate the need to be an issuer of securities) (in $Bn)	32	309
TB_72	Impact to Derivatives CCR RWA of treating IG corporates as IG corporates even if no publicly traded security is available (this should be applied to all corporates that are NOT highly regulated financial entities) (in $Bn)	40	310
TB_73	Impact to Derivatives CCR RWA of aligning short-term risk weight for banks with that of Basel (i.e., all bank exposures <=3 months subject to lower risk weight in Table 2, p. 54 of 1087 US NPR) (in $Bn)	30	311
TB_74	Impact to Derivatives CCR RWA of other mitigating items (in $Bn)	14	312
TB_75	Basel III Standardised RWA for Clearing (in $Bn)	76.1	323
TB_76	Basel III ERBA RWA for Clearing (in $Bn)	101.9	324
TB_77	Total Basel III ERBA capital requirement with 10 bp NPR Bump (excluding Basel III Standardised) (in $Bn)	2	325
TB_78	Percent change of Basel III ERBA capital requirement with 10 bp NPR Bump vs. Basel III Standardised	22%	326
TB_79	Total capital impact from higher GSIB (in $Bn)	5.2	328
TB_80	Total clearing under US NPR (Basel III Endgame + GSIB)	16.2	329
TB_81	Percent change of clearing under US NPR (Basel III Endgame + GSIB) vs. Current	80%	330
TB_82	Impact of excluding client cleared leg in GSIB (in $Bn)	5.6	332
TB_83	Impact of excluding client cleared in CVA (in $MM)	957	333
TB_84	Total capital impact to CCR with index decomposition and STM/CTM netting allowed for client clearing (CET1 + SCB ERBA + MII GSIB + 10 bps) (in $MM)	-536	334
TB_85	Impact to CCR of removal of public listing requirement (in $MM)	-654	335
TB_86	Total clearing impact due to mitigants	-6%	336
TB_87	Ratio of ERBA SA-CVA delta and vega RWA (with netting sets under BA-CVA including scalar) to ERBA SA-CVA delta and vega RWA	1.67	342
TB_01	Total current market risk RWA (current model approval status) (in $Bn)	383	9
TB_01a	Total revised market risk capital requirement (assuming current model approval status) (in $Bn)	661	10
TB_02	Total revised market risk RWA (assuming current model approval status) with mitigating items (in $Bn)	474	11
TB_03	Total ERBA CVA RWA (in $Bn)	217	12
TB_03a	Total ERBA CVA RWA with mitigating items (in $Bn)	167	13
TB_04	Total current SFT RWA (in $Bn)	486	14
TB_04a	Total ERBA SFT RWA (in $Bn)	574	15
TB_05	Total ERBA SFT RWA with mitigating items (in $Bn)	291	16
TB_06	Total current Derivatives CCR RWA (including Default Fund RWA) (in $Bn)	700	17

Index	Description	Aggregate Value, Change, or Ratio.	Footnote
TB_06a	Total ERBA Derivatives CCR RWA (including Default Fund RWA) (in $Bn)	680	18
TB_07	Total ERBA Derivatives CCR RWA with mitigating items (including Default Fund RWA) (in $Bn)	556	19
TB_08	Total revised market risk RWA for full portfolio under SA (in $Bn)	811	20
TB_08a	Total revised market risk RWA for full portfolio under SA with mitigating items (in $Bn)	552	21
TB_09	Percent change of total revised market risk RWA for full portfolio under SA vs. total current market risk RWA	112%	22
TB_10	Percent change of total revised market risk RWA for full portfolio under SA excluding the impact related to the treatment of GSEs vs. total current market risk RWA	93%	23
TB_11	Percent change of total revised market risk RWA (assuming current model approval status) vs. total current market risk RWA	73%	24
TB_12	Percent change of ERBA SFT RWA vs. current SFT RWA	18%	26
TB_13	Ratio of total revised market risk RWA for full portfolio under SA to total current market risk RWA	2.12	36
TB_14	Ratio of total revised market risk RWA for full portfolio under SA with diversification impacts to total current market risk RWA	1.44	37
TB_15	Revised market risk RWA impact of excluding sovereigns & supranationals in SA-DRC and SBM calculation (in $Bn)	44.7	38
TB_15a	Revised market risk RWA impact of excluding local currency sovereigns from SA-DRC (in $Bn)	35.6	39
TB_16	Revised market risk RWA impact of treating UMBS-eligible and ineligible pools as exposure to the same UMBS obligor in SBM (in $Bn)	70.3	40
TB_17	Revised market risk RWA impact of reducing SBM and LGD rate for municipal bonds (in $Bn)	5.0	41
TB_18	Revised market risk RWA impact of reverting 'p' factor to 0.5 in securitization framework (in $Bn)	7.4	42
TB_19	Revised market risk RWA impact of reducing carbon trading risk weights (in $Bn)	5.4	43
TB_20	Revised market risk RWA impact of including ineligible CVA hedge in market risk (in $Bn)	11.1	44
TB_21	Revised market risk RWA impact to CTP SA-DRC by allowing decomposition, non-securitization RWs, non-securitization bucketing, and non-zero recovery	27.8	45
TB_22	Percent change of total revised market risk for introducing an inter risk-class correlation parameter of 0.5 relative to total revised market risk for full portfolio under SA with mitigating items (pre-diversification impact)	14%	46
TB_23	Revised market risk RWA impact of introducing an inter risk-class correlation parameter of 0.5 (in $Bn)	86.4	47

Index	Description	Aggregate Value, Change, or Ratio.	Footnote
TB_24a	Term-repo style transaction SA-DRC under FRTB market risk approach (including collateral requirement) relative to total ERBA SFT RWA	37.7%	49
TB_24b	Term-repo style transaction SA-DRC under FRTB market risk approach (including collateral requirement) relative to total ERBA SFT RWA with mitigating items	93.9%	49
TB_25	Marginal impact to SBM of excluding sovereign exposures and MDB exposures receiving a 0% risk weight	-3%	54
TB_26	Marginal impact to non-securitization SA-DRC of excluding EM sovereigns receiving a 0% risk weight	-24%	56
TB_27	Marginal impact to non-securitization SA-DRC of excluding sovereigns other than US government securities and supranationals	-3%	57
TB_28	Percent change of revised market risk capital for GSE exposures in the US NPR vs. revised market risk capital for GSE exposures where TBAs and UMBS-eligible deliverable pools are not treated as the same obligor (i.e., the advocacy)	98%	64
TB_29	Percent change of total market risk for introducing an inter risk-class correlation parameter of 0.5 vs. total market risk FRTB-SA without mitigating items	10.7%	65
TB_30	Percent change of revised market risk RWA for CTP (including SA-DRC without decomposition and assuming p = 1) vs. current market risk RWA	195%	67
TB_31	Percent change of revised market risk RWA for CTP (including SA-DRC with decomposition, non-securitization risk weights, non-zero recovery, and non-securitization bucketing for aggregation) vs. current market risk RWA	33%	68
TB_32	Percent change of revised market risk RWA for PSE exposures vs. current market risk RWA	46%	79
TB_33	Percent change of revised market risk RWA for PSE exposures (with reduced SBM risk weights for tax-exempt PSE exposures) vs. current market risk RWA	27%	80
TB_34	Percent change of revised SA-DRC RWA for PSE exposures (with LGD changed to 50%) vs. revised SA-DRC RWA	-32%	83
TB_35	Percent change of revised SA-DRC RWA for PSE exposures in the US NPR vs. Basel FRTB SA-DRC RWA	37%	84
TB_36	Percent change of revised market risk RWA for PSE exposures (with reduced SBM risk weights for tax-exempt PSE exposures and LGD changed to 50% for PSE exposures) vs. current market risk RWA	8%	85
TB_37	Percent change of revised market risk RWA for carbon trading (assuming proposed risk weights and without vintage offset) vs. revised market risk RWA (i.e., the US NPR)	-52%	108
TB_38	Percent change of revised market risk RWA for total commodity area (assuming proposed risk weights for carbon trading and without vintage offset) vs. revised market risk RWA (i.e., the US NPR)	-16%	109

Index	Description	Aggregate Value, Change, or Ratio.	Footnote
TB_39	Ratio of total revised market risk RWA (assuming current model approval status) to total current market risk RWA	1.73	112
TB_40	Ratio of total revised market risk RWA (assuming current model approval status) with combined impact to total current market risk RWA	1.24	113
TB_14	Ratio of total revised market risk RWA under SA with diversification impact to total current market risk RWA	1.44	37
TB_41a	SA-DRC total mitigation (including Sovereigns, CTP, Muni, and Securitization) (in $Bn)	79	115
TB_41b	SA-DRC total mitigation due to diversification (in $Bn)	11	116
TB_42	NMRF RWA reduction by changing rho parameter from 0.6 to 0.25 (in $Bn)	40.1	117
TB_43	IMCC RWA reduction by changing rho parameter from 0.5 to 0.75 (in $Bn)	28	118
TB_44	Percent change to SBM of introducing an inter risk-class correlation parameter of 0.5	-22%	119
TB_45	SBM RWA reduction (assuming current model approval status) by introducing an inter risk-class correlation parameter of 0.5 (in $Bn)	28	120
TB_46	Percent change to non-securitization DRC of using US NPR risk weights versus Basel risk weights	4%	182
TB_47	Ratio of total ERBA SFT RWA to current SFT RWA	1.18	185
TB_48	Ratio of total ERBA SFT RWA with mitigating items to Current SFT RWA	0.60	186
TB_49	Impact of removing SFT minimum haircut floors (in $Bn)	124	187
TB_50	Impact to SFTs of treating broker dealers as banks (in $Bn)	7	188
TB_51	Impact to SFTs of treating highly regulated entities as IG corporates (this would obviate the need to be an issuer of securities) (in $Bn)	16	189
TB_52	Impact to SFTs of treating IG corporates as IG corporates even if no publicly traded security is available (this should be applied to all corporates that are NOT highly regulated financial entities) (in $Bn)	28	190
TB_53	Impact to SFTs of aligning short-term risk weights for banks with that of Basel (i.e., all bank exposures <=3 months subject to lower risk weight in Table 2, p. 54 of 1087 in the US NPR) (in $Bn)	7	191
TB_54	Impact to SFTs of other changes (in $Bn)	100	192
TB_55	Percent change to SFTs of removing the minimum haircut floor framework	-26%	202
TB_56	Percent change to SFTs of not including the risk-mitigating benefit of financial collateral received on all SFTs with unregulated FIs for a netting set upon breaching the minimum haircut floor	44%	205
TB_57	Percent change to SFTs of exempting GSE securities from the minimum haircut floor framework	-3%	223
TB_58	Total ERBA CVA RWA (in $Bn)	217	264

Index	Description	Aggregate Value, Change, or Ratio.	Footnote
TB_59	Ratio of ERBA CVA RWA (with additional FI Buckets, reduced risk weights for carbon trading, exclusion of client cleared leg of client cleared transactions, increased cross-bucket correlation of 70% between buckets 8 and 1-6) to ERBA CVA RWA	0.77	265
TB_60	Percent change to ERBA CVA RWA (with additional FI Buckets, reduced risk weights for carbon trading, exclusion of client cleared leg of client cleared transactions, increased cross-bucket correlation of 70% between buckets 8 and 1-6) vs. ERBA CVA RWA	-23%	266
TB_61	Total ERBA BA-CVA RWA with mitigating items (in $Bn)	50	267
TB_62	Percent change to CVA RWA (using FI granular buckets) vs. ERBA CVA RWA	-19%	268
TB_63	Percent change to CVA RWA (excluding client cleared leg of cleared transactions) vs. ERBA CVA RWA	-9%	269
TB_64	Percent change to CVA RWA (using 70% cross-bucket correlation for CCS risk between index bucket 8 and buckets 1 - 6) vs. ERBA CVA RWA	-8%	270
TB_65	Percent change of ERBA CVA RWA vs. current CVA RWA	-13%	273
TB_63	Percent change to CVA RWA (excluding client cleared leg of cleared transactions) vs. ERBA CVA RWA	-9%	284
TB_66	Percent change to BA-CVA (using FI granular buckets) vs. ERBA CVA RWA	-14%	286
TB_67	Percent change to revised market risk RWA of including ineligible CVA hedges in market risk	3%	291
TB_68	Percent change to SA-CVA of using 70% cross-bucket correlation for CCS between bucket 8 and buckets 1-6 instead of the 45% correlation	-13%	296
TB_69	Ratio of total ERBA Derivatives CCR RWA to current Derivatives CCR RWA	0.97	307
TB_70	Impact to Derivatives CCR RWA of treating broker dealers as banks (in $Bn)	8	308
TB_71	Impact to Derivatives CCR RWA of treating highly regulated entities as IG corporates (this would obviate the need to be an issuer of securities) (in $Bn)	32	309
TB_72	Impact to Derivatives CCR RWA of treating IG corporates as IG corporates even if no publicly traded security is available (this should be applied to all corporates that are NOT highly regulated financial entities) (in $Bn)	40	310
TB_73	Impact to Derivatives CCR RWA of aligning short-term risk weight for banks with that of Basel (i.e., all bank exposures <=3 months subject to lower risk weight in Table 2, p. 54 of 1087 US NPR) (in $Bn)	30	311
TB_74	Impact to Derivatives CCR RWA of other mitigating items (in $Bn)	14	312
TB_75	Basel III Standardised RWA for Clearing (in $Bn)	76.1	323
TB_76	Basel III ERBA RWA for Clearing (in $Bn)	101.9	324
TB_77	Total Basel III ERBA capital requirement with 10 bp NPR Bump (excluding Basel III Standardised) (in $Bn)	2	325
TB_78	Percent change of Basel III ERBA capital requirement with 10 bp NPR Bump vs. Basel III Standardised	22%	326

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TB_83	Impact of excluding client cleared in CVA (in $MM)	957	333
TB_84	Total capital impact to CCR with index decomposition and STM/CTM netting allowed for client clearing (CET1 + SCB ERBA + MII GSIB + 10 bps) (in $MM)	-536	334
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TB_86	Total clearing impact due to mitigants	-6%	336
TB_87	Ratio of ERBA SA-CVA delta and vega RWA (with netting sets under BA-CVA including scalar) to ERBA SA-CVA delta and vega RWA	1.67	342

Appendix 9 – Glossary

Acronym	Meaning
ABS	Asset Backed Securities
ALM	Asset-Liability Management
BA-CVA	Basic CVA Approach
BCOM	Bloomberg Commodity Index
BOLI	Bank-Owned Life Insurance
CCAR	Comprehensive Capital Analysis And Review
CCP	Central Counterparty
CCR	Counterparty Credit Risk
CCS	Counterparty Credit Spread
CDS	Credit Default Swaps
CEU	Commercial End-User
CMBS	Commercial Mortgage-Backed Securities
COLI	Company-Owned Life Insurance
CRC	Country Risk Classification
CRR	Capital Requirements Regulation
CSR	Credit Spread Risk
CTM	Collateralized-to-Market
CTP	Correlation Trading Portfolio
CUSIP	Committee on Uniform Securities Identification Procedures
CVA	Credit Valuation Adjustment
DCO	Derivatives Clearing Organization
DRC	Default Risk Charge
EAD	Exposure at Default
ERBA	Expanded Risk-Based Approach
ES	Expected Shortfall
ESS	Effective Sample Size
ETF	Exchange-Traded Fund
ETS	Emissions Trading System
FCM	Futures Commission Merchants
FI	Financial Institutions
FRTB	Fundamental Review of the Trading Book
GICS	Global Industry Classification Standard
GMS	Global Market Shocks
GSE	Government-Sponsored Enterprise
GSIB	Global Systemically Important Bank
HPL	Hypothetical Profit and Loss
HQLA	High Quality Liquid Assets
IG	Investment Grade
IM	Initial Margin
IMA	Internal Models Approach
IMCC	Aggregate Capital Requirement for Modellable Risk Factors
LCR	Liquidity Coverage Ratio

Acronym	Meaning
LGD	Loss-Given-Default
MDB	Multilateral Development Bank
MMMF	Money Market Mutual Funds
MPOR	Margin Period of Risk
MTA	Minimum Transfer Amount
MTM	Mark-to-Market
NMRF	Non-Modellable Risk Factors
NPV	Net Present Value
OECD	Organization for Economic Cooperation and Development
OET	Optional Early Termination
OTC	Over-the-Counter
PFE	Potential Future Exposure
PLA	Profit and Loss Attribution
PSE	Public Sector Entities
QIS	Quantitative Impact Study
QMNA	Qualifying Master Netting Agreement
RC	Replacement Cost
REIT	Real Estate Investment Trusts
RFET	Risk Factor Eligibility Test
RMBS	Residential Mortgage-Backed Securities
RWA	Risk-Weighted Asset
SA	Standardized Approach
SA-CCR	Standardized Approach for Counterparty Credit Risk
SA-CVA	Standardized CVA Approach
SBM	Sensitivities-Based Method
SCB	Stress Capital Buffer
SCCL	Single-Counterparty Credit Limit
SES	Stressed Expected Shortfall
SFT	Securities Financing Transactions
SIMM	Standard Initial Margin Model
SLR	Supplementary Leverage Ratio
SPV	Special Purpose Vehicle
STM	Settled-to-Market
TBA	To-Be-Announced
UMBS	Uniform Mortgage-Backed Securities
VaR	Value-at-Risk
VM	Variation Margin