April 8, 2024

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

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

Dear Sir/Madam,

We appreciate the opportunity to provide further clarifications to our letter submitted to the Agencies on January 16th, 2024 (**"January Letter"**)[1] in relation to the above-referenced proposal (the **"Proposed Rulemaking"**).[2] Specifically, below we provide additional information and clarifications on our comments relating to the following aspects of the Proposed Rulemaking:

- Equity Investment in Funds (Index Bucket Approach)
- Industry QIS Results (FRTB SA RWA Impact)

[1] Letter from ISDA and SIFMA to the Agencies (January 16, 2014), available at https://www.isda.org/a/1ElgE/ISDA-and-SIFMA-Response-to-US-Basel-III-NPR.pdf

[2] Regulatory Capital Rule: Large Banking Organizations and Banking Organizations With Significant Trading Activity, 88 Fed. Reg. 64,028 (Sept. 18, 2023)

I. Equity Investment in Funds (Index Bucket Approach)

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 equity investments in funds (EIIFs) remains very problematic under the FRTB-SA. Although the FRTB IMA in the Proposed Rulemaking contains some improvements for the treatment of EIIFs, the FRTB-SA treatment is excessively conservative and will substantially increase capital requirements. The main challenge for banking organizations is the limitation in the availability of data. The look through approach (LTA) requires fund managers to publish all of their underlying fund holdings on a frequent basis and banks to translate this into the relevant risk measures under FRTB-SA. Firstly, for a substantial portion of funds, in particular mutual funds, fund holding reporting on such a frequent basis is not available. Secondly, banking organizations will face significant challenges in implementing the necessary infrastructure and computational enhancements due to their scale and complexity. This is due to the size of fund holdings for which risk data needs to be generated when those holdings are not on the balance sheet and therefore not subject to the standard data checks.

Moreover, the index tracking bucket approach as prescribed in FRTB-SA would not be implementable for most mutual funds given that most of them are not passive index trackers. Consequently, banking organizations would be forced to apply the punitive "fallback method"[3] for the vast majority of the fund population. This "fall back method", as currently defined, is overly conservative and insufficiently risk sensitive with respect to the underlying risk of the fund positions.[4]

The significance of the impact from the use of the fall back method can be seen in the most recent Basel III monitoring report[5]. It was noted that several G-SIBs reported conservative assumptions for the capitalization of EIIFs under the revised market risk framework. The high capital charge is driven by the application of the fall back method instead of the other available methods such as index tracking or hypothetical portfolio approach. The Associations note that 80% of the reported capital charge was excluded due to the pervasive use of the fall back method. Given how FRTB-SA is specified currently, the Associations cannot see how such an adjustment from the Basel Committee in the Basel III monitoring report provides an accurate and representative impact estimate.

In the January Letter, the Associations proposed enhancing the currently defined index buckets in the FRTB-SA framework to include EIIFs as well[6]. We note that the standard initial margin model ("**SIMM**") methodology already incorporates the use of index buckets for funds into its

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[3] § _.205(e)(3)(iii)

[4] Many of these points are made on pages 34-35 in the letter from ISDA and SIFMA to the Agencies (January 16, 2014), available at https://www.isda.org/a/1ElgE/ISDA-and-SIFMA-Response-to-US-Basel-III-NPR.pdf

[5] Basel III Monitoring Report: https://www.bis.org/bcbs/publ/d570.pdf

[6] See page 34 in the letter from ISDA and SIFMA to the Agencies (January 16, 2014), available at https://www.isda.org/a/1ElgE/ISDA-and-SIFMA-Response-to-US-Basel-III-NPR.pdf

standardized calculations. This treatment should be extended to the FRTB-SA capitalization of funds to ensure a more risk sensitive capitalization even when the LTA or index tracking approach is not possible or practical. The selection of the appropriate fund bucket could be based on a fund's prospectus or mandate. For example, if a mutual fund's prospectus specifies that it will primarily invest in U.S. large-cap equity securities, then a position in that mutual fund should be capitalized by assigning it to the "large cap and liquid economy funds" bucket per Table 1 below.

The Associations have produced additional recommendations for a methodology similar to the index bucket approach, encompassing an approach for determining appropriate risk weights. The approach for a banking organization to allocate a fund to an appropriate fund bucket without any requirement to look through the fund is a key component of the new methodology. A banking organization should be allowed to map its fund exposure to one of the proposed buckets (see below) based on the banking organization's internal policy and procedures. The approach to map fund exposures to the proposed buckets should consider whether the fund meets the criteria for "well diversified", the fund's main investment strategy, and available information on the fund's actual holdings.

The dimensions for these new fund-specific buckets should be based on asset class, broad fund type, and credit quality (for fixed income only) according to the Table 1 below:

Table 1: Proposed Fund Buckets by Asset Class, Fund Type, and Credit Quality

Asset Class	Fund Type/Credit Quality
Fixed Income (including money market, municipal, and agency funds[7])	IG Sov Funds (including agency funds)
	Speculative & Sub-Speculative Sov Funds
	IG Non-Sov Funds (including municipal funds)
	Speculative & Sub-Speculative Non-Sov Funds (including municipal funds)
Equity	Large cap and liquid economy funds
	Other equity funds

In addition, the Associations also propose a second alternative approach to calculate a fund's general interest rate (GIRR) and credit spread non-securitization (CSR NS) delta measures using the effective duration[8] and then mapping the resulting measure to the appropriate CSR NS delta buckets (i.e., IG or Speculative & Sub-Speculative in buckets 18 and 19, respectively) and GIRR buckets (i.e., based on currency).

Lastly, the Associations make several recommendations to make the default risk charge (DRC) calculation less cumbersome for banking organizations to implement.

[7] Money market funds would be assigned to any of the four fixed income fund buckets depending on the underlying fund holdings.

[8] Effective duration is a measure of the fund's sensitivity to interest rates and gives an indication of how a fund's net asset value (NAV) will change as interest rates change. It considers the coupon rates and bond maturities for all underlying holdings.

A. Introduction to the Risk Weight Approach

The risk weights for the fund buckets should be determined based on asset class and capital for a set of representative funds[9]. For a fixed income fund, the risk weights should be based on the type of underlying holdings and the overall credit quality / duration of the fund. For equity funds, the risk weights should be similar to those provided in the existing equity index buckets (i.e., 15% to 25%).

An approach to derive more precise risk weights is to calculate capital based on the LTA for a set of representative and highly liquid funds (e.g., ticker symbols LQD[10], HYG[11], SHY[12], EMB[13] and MUB[14]). Then, an effective fund risk weight can be derived at the ETF-level that infers the same level of capital. Given each fund has a single effective duration and the approach seeks to cover a broader set of durations, a scaling factor must be applied to the base effective risk weight to generate the full set of risk weights.

B. Details of the Risk Weight Approach

1. Fixed Income Funds

For the calibration of risk weights, a one-time look through is performed on the four representative fixed income funds, which cover non-sovereigns and sovereigns across Speculative & Sub-Speculative and IG credit quality. Hence, the focus is on CSR NS delta for non-sovereigns and general interest rate risk (GIRR) delta for sovereigns[15]. After performing LTA on the constituents, a total capital figure is calculated and used to derive the effective risk weights. The risk weights are calculated as:

$$Risk\ Weight = \frac{CSR\ NS\ Delta\ Capital + GIRR\ Delta\ Capital}{EQ\ Delta\ (Funds' Market\ Value)} = \frac{Total\ Delta\ Capital}{EQ\ Delta\ (Funds' Market\ Value)}$$

[9] See Annex 1 in the appendix for volatility statistics regarding the set of representative funds.

[10] LQD is the iShares iBoxx $ Investment Grade Corporate Bond ETF, which seeks to track the investment results of an index composed of U.S. dollar-denominated, investment-grade corporate bonds.

[11] HYG is the iShares iBoxx $ High Yield Corporate Bond ETF, which seeks to track the investment results of an index composed of U.S. dollar-denominated, high yield corporate bonds.

[12] SHY is the iShares 1-3 Year Bond ETF, which is a passively managed fund by iShares that tracks the performance of the Barclays Capital U.S. 1-3 Year Treasury Bond Index.

[13] EMB is the iShares J.P. Morgan USD Emerging Markets Bond ETF, seeks to track the investment results of the J.P. Morgan EMBI® Global Core Index. The EMBI Global Core Index is a broad, diverse U.S. dollar-denominated emerging markets debt benchmark that tracks the total return of actively traded external debt instruments in emerging market countries.

[14] MUB is the iShares National Muni Bond ETF, which seeks to track the investment results of an index composed of investment-grade U.S. municipal bonds.

[15] Local sovereigns are assumed to be credit risk-free.

Given the ETFs have a unique duration that falls between the benchmark durations (i.e., between 0 to 1-year, 1-year to 5-year, 5-year to 10-year, and >10-year), a conservative approach is to scale up each effective duration to the nearest higher benchmark duration, which corresponds to the highest point of the duration range [16] [17]. Then, in order to derive the risk weight for each tenor bucket, the GIRR and the CSR NS capital are scaled for the change in duration[18]. Additionally, the GIRR capital is scaled to account for the higher risk weights assigned to shorter tenors[19].

It is important to note that most of the risk weights derived according to this methodology are much lower than the prescribed 70% risk weight in the Basel rule and in the Proposed Rulemaking. This demonstrates that the risk weights are calibrated very conservatively in the Basel rule and in the Proposed Rulemaking. As can be seen in Table 2 below, it is also interesting to note that a 70% risk weight is commensurate with the economic risk of speculative and sub-speculative non-sovereign funds with a duration of 20 years. In practice, the exposure for a speculative fund is very unlikely to fall under this bucket since speculative grade debt is usually issued with a much shorter duration (e.g., HYG has a duration of 3.55 years). Therefore, the 70% risk weight in Table 2 below is proposed for completeness purposes.

Table 2: Derived Risk Weights for Fixed Income

		Duration			
Asset Class	**Fund Type Bucket**	**≤1-year[20]**	**1-year to 5-year**	**5-year to 10-year**	**>10-year**
Fixed Income	**IG Sov Funds**	1%	4%	8%	16%
	Speculative & Sub-Speculative Sov Funds	3%	10%	20%	40%
	IG Non-Sov Funds	2.5%	10%	20%	45%
	Speculative & Sub-Speculative Non-Sov Funds	5%	20%	35%	70%

[16] For example, LQD has an effective duration of 8.43. In order to map it correctly to the 5- to 10-year bucket, the effective duration is scaled up by $\frac{10}{8.43}$ to normalize duration to the 10-year point before calculating the risk weights.

[17] The Associations note that 20 years was deemed to be sufficiently conservative for the >10-year bucket.

[18] Using the same example of LQD, suppose we want to derive the risk weight for the 1-year bucket using the previously calculated 10-year duration. The 10-year duration would be scaled by 1/10 to derive the 1-year risk weight.

[19] For example, suppose the GIRR risk weight at 10-year is 0.78% and the GIRR risk weight at 1-year is 1.13%. An additional scalar of $\frac{1.13\%}{0.78\%}$=1.45 is applied to the duration, which partially offsets the lower duration of shorter-dated funds.

[20] Money market funds would be considered to have a duration of ≤1 year for the purpose of assigning an appropriate risk weight.

2. Equity Funds

For equity funds, the LTA based on the S&P 500 yields very similar results to the existing large capitalization and developed market equity risk weights (i.e., a 15% risk weight). If we were to recalculate capital assuming the components of the S&P 500 were small capitalization companies or operating in emerging market countries, the result is not significantly higher than the capital calculated with the actual components of the S&P 500. We believe that leveraging the existing small cap or emerging market risk weight of 25% is appropriate and conservative. Hence, for simplicity, the Associations propose to leverage the same risk weights as for indices: 15% for "Equity indices that are both large market cap and liquid market economy" and 25% for "Equity indices that are both large market cap and liquid market economy (non-sector specific)".

Table 3: Derived Risk Weights for Equity

Asset Class	Fund Type Bucket	Risk Weight
Equity	**Large cap and liquid economy funds**	15%
	Other equity funds	25%

3. Proposal for SBM Using New Fund-Specific Buckets

A key element of this proposal is that there would be no requirement to decompose an investment fund. The fund allocation and mapping to the proposed fund buckets would be part of a banking organization's internal policies and procedures and would be based on the fund's mandate/prospectus or holdings. This mapping process would be performed on a periodic basis.

The risk weight of the investment fund should be based on the type of fund and duration which are most representative of the investment fund's strategy, according to Table 4 below. These risk weights will be applied to sensitivities generated in alignment with the methodology used for equity exposures.

Table 4: Risk Weights per Asset Class and Fund Type

		Duration			
Asset Class	**Fund Type Bucket**	**≤1-year**	**1-year to 5-year**	**5-year to 10-year**	**>10-year**
Fixed Income	**IG Sov Funds**	1%	4%	8%	16%
	Speculative & Sub-Speculative Sov Funds	3%	10%	20%	40%
	IG Non-Sov Funds	2.5%	10%	20%	45%
	Speculative & Sub-Speculative Non-Sov Funds	5%	20%	35%	70%
Equity	**Large cap and liquid economy funds**	15%			
	Other equity funds	25%			

In relation to fixed income funds, four buckets are proposed: IG Sov Funds, Speculative & Sub-Speculative Sov Funds, IG Non-Sov Funds, and Speculative & Sub-Speculative Non-Sov Funds. Within each of these four buckets, the correlation determination, ρ_{kl}, would be aligned to § __.209(b)(2)(iii)(C) (i.e., in the same manner that sensitivities in the index buckets 18 and 19 are aggregated). Aggregation across the four buckets would align with the principles specified in § __.209(b)(2)(iv) in which the correlation is defined as the product of a correlation for credit quality and sector. Different credit quality (i.e., IG versus Speculative & Sub-Speculative) would mean that the credit quality correlation is set to 50% while the same credit quality would result in 100% credit quality correlation. Similarly, different sector (i.e., Sov versus Non-Sov) would result in 75% sector correlation (i.e., in the same manner as the sector correlation between buckets 18 and 19), while the same sector would result in a 100% sector correlation.

In relation to equity funds, there would be two buckets as per Table 4. The intra-bucket correlation would be determined based on § __.209(b)(5)(iii)(A)(1) for sensitivities to equity repo rates and spot prices if the funds were the same. For different funds within the same bucket, the correlation would be 80% as per § __.209(b)(5)(iii)(A)(2)(v). This correlation would be multiplied by 99.9% if one sensitivity is against spot prices and the other is against repo rates based on § __.209(b)(5)(iii)(A)(3). The cross-bucket correlation between the large cap equity fund bucket and the other equity fund bucket would be 75% as per § __.209(b)(5)(iv)(C).

There would be no recognition of any diversification benefit across fixed income and equity fund buckets or with other risk classes. Capital requirements for fixed income funds as well as well as for equity funds under this approach would be calculated separately.

As per § __.209(c)(1), the same buckets defined above would apply in the calculation of vega capital requirements. Similar to the other risk classes in Table 11 to § __.209, the 100% vega risk weight should apply to the fixed income fund and equity fund buckets. The vega risk correlation parameter, ρ_{kl} equals $\rho_{kl}^{(delta)} \times \rho_{kl}^{(option\ maturity)}$, where $\rho_{kl}^{(delta)}$ is the corresponding delta correlation parameter and $\rho_{kl}^{(option\ maturity)}$ is defined as in § __.209(c)(3). For purposes of aggregating vega bucket-level risk positions across different buckets, the same cross-bucket correlation parameters used for delta aggregation, γ_{bc}, should be used.

For curvature, the same buckets from the calculation of delta capital should be used. For calculating the net curvature risk position, CVR_k, the curvature risk weight that represents a shock to risk factor k is a relative shift equal to the delta risk weight corresponding to risk factor k as per § __.209(d)(2) for both fixed income and equity fund buckets. For fixed income funds, the curvature risk correlation parameter, ρ_{kl}, should be the corresponding delta correlation parameter, $\rho_{kl}^{(name)}$, squared. For the equity funds, the curvature risk correlation parameter, ρ_{kl}, should be the same as the corresponding delta correlation parameter, ρ_{kl}, squared. For the purposes of aggregating curvature bucket-level risk positions across different buckets, the delta cross-bucket correlation parameter, γ_{bc} squared, should be used.

C. Alternative Proposal for SBM

An alternative proposal is to allow firms to use a fund's effective duration to derive GIRR and CSR NS delta sensitivities as follows:

$$GIRR\ Delta\ sensitivity = CSR\ NS\ Delta\ sensitivity = EQ\ Delta \times Effective\ Duration$$

In this approach, the derived risk weight should be interpolated to align with the FRTB-SBM tenor points for CSR NS delta and GIRR delta[21].

1. Proposal

The Associations propose that a new method for calculating the standardized measure for market risk using duration be added to § __.205(e)(2). The GIRR and CSR NS delta sensitivities would be defined according to the formula above. The equity delta measure should be the same as that used under the fall back method. The resulting sensitivities should then be assigned to the relevant GIRR and CSR NS buckets based on the duration of the fund. For CSR NS, the sensitivity should be assigned to the relevant index bucket. For options on funds, the curvature capital for GIRR and CSR NS risk classes could be calculated by shocking the fund's value by the corresponding curvature risk weights multiplied by the fund's duration. Vega capital could be calculated according to the fallback approach.

[21] For example, HYG has an effective duration of 3.55. The CSR NS delta and GIRR delta would be interpolated to the 3-year and 5-year tenor points. The CSR NS delta would be assigned to buckets 18 for IG and 19 for Speculative & Sub-Speculative with 1.5% risk weight and 5% risk weight, respectively. Then, the CSR NS delta charge can be computed. Similarly, GIRR delta would be assigned based on currency (i.e., USD in this example).

The proposed DRC treatment for EIIFs is operationally cumbersome and can potentially suffer from the same challenges as SBM.

The first available option for DRC is to perform LTA, which will have the same challenges as SBM. The second available option is an alternative approach that requires banks to review the mandate of each fund to:

(a) Find the worst risk weight by assuming that the fund invests to the maximum extent in exposures with the highest risk weights; and

(b) Determine whether the risk weight applied to the fund is prudent or if residual risk add-on (RRAO) must apply.

The second option is operationally very cumbersome and could be punitive as fund mandates do not often prescribe explicit limits for different types of assets that the fund can invest in. Finally, the determination of whether to apply RRAO can be quite subjective.

1. Proposal

For risk weights and LGDs, the Proposed Rulemaking should allow an undecomposed fund to use risk weights and LGDs already defined in the Proposed Rulemaking for the types of assets that constitute the investment fund's main strategy[22]. Therefore, the scope of Table 1 to § __.210 (i.e., the risk weights table) and the scope of § __.210(b)(1)(v) (i.e., the LGD rates) should be amended to include:

"Investment Funds Whose Main Strategy Aligns to the Existing Buckets"

For gross default exposure calculations, the Associations welcome the provision in the Proposed Rulemaking in § __.210(b)(1)(iii), which limits the gross default exposure of a call option to its mark-to-market (MTM). In addition, the Associations propose that for investment funds where the exposure is non-linear (e.g., options and other derivatives), a banking organization should be allowed to calculate gross default exposure using one of the two approaches below consistently for all market risk covered positions that reference the same fund:

(1) Allow gross default exposure to be adjusted by the delta of the derivative to account for the probability of a P&L event occurring due to default of the underlying holdings. This is similar to a provision for effective notional in the current U.S. Basel III Market Risk rule for the standardized specific risk add-on calculation[23]. It would also be consistent with the calculation of gross default exposure if the investment fund were decomposed and the gross default exposure were calculated as the sum of marginal P&L based on each of the underlying holdings defaulting individually.

[22] For example, a U.S. Treasury Fund should have a 0% risk weight and an IG corporate fund should have a 4.1% risk weight. Similarly, a fund that mainly holds senior unsecured fixed income instruments should use a 75% LGD. This will avoid the overly conservative alternatives such as treating the investment fund as a single name equity using 0% recovery and speculative/sub-speculative risk weights.

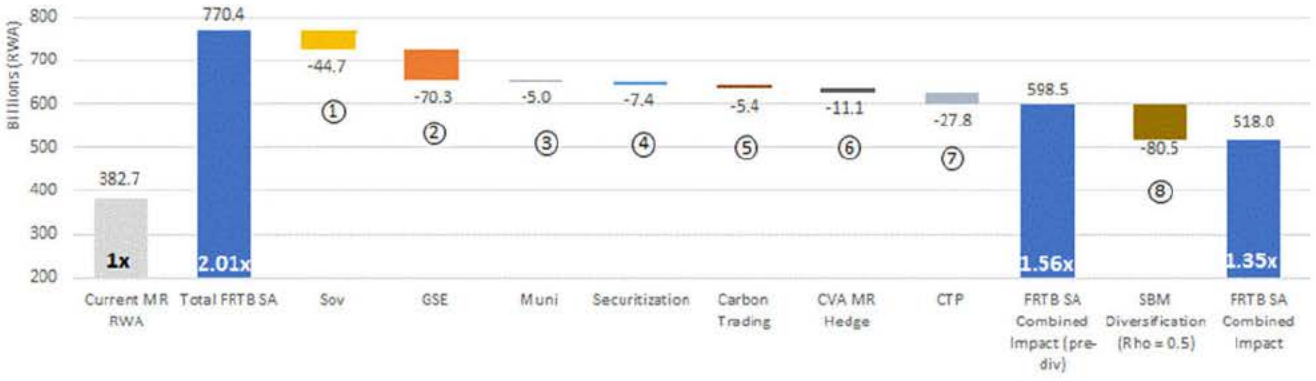
[23] Federal Reserve, Regulatory Capital Rule: Implementation of Basel III, Capital Adequacy, Transition Provisions, etc. 78 Fed. Reg. 62,257 (Oct. 11, 2013).

(2) Alternatively, a banking organization should be permitted to calculate the gross default exposure of an undecomposed investment fund as the change in value of the instrument due to 10% default of the underlying holdings multiplied by 10. This formula conservatively assumes that the investment fund is comprised of ten underlying holdings. Each underlying holding would represent 10% with respect to the investment fund concentration. This approach would allow a banking organization to better estimate the default risk for positions with material convexity (e.g., in the case of a put option where the spot price of the underlier is significantly higher than the strike price, a 10% default of the underlying holdings will have a more proportionate P&L impact compared to the unrealistic 100% shock). This would be a notable improvement over the Basel rule's assumption that all the underlying holdings of the fund default simultaneously, which is uneconomic and may overestimate gains from default for instruments bearing long convexity protection and losses from default for instruments bearing short convexity risk. Assuming a 10% limit for single asset concentration can be supported by other regulatory requirements for diversification (e.g., UCITS funds) and remains more conservative than the typical concentration observed in the market. Additionally, where a banking organization has used the hypothetical portfolio approach based on the most recent quarterly disclosure of the investment fund's historical holdings in the computation of SBM, the banking organization should also be allowed to compute the DRC capital based on these historical holdings of the investment fund.

II. Industry QIS Results (FRTB SA RWA Impact)

Following the submission of the January Letter, the Associations performed additional analysis on the industry QIS data collected. In Figure 1 below we have updated the FRTB-SA waterfall chart to reflect final numbers[24]:

Figure 1: FRTB SA RWA Impact[25]



[24] Appendix B contains updated ratios from the January Letter where they are impacted

[25] Total FRTB-SA without any mitigating items changes from $810.7 Bn to $770.4 Bn, while the ratio relative to current market risk RWA goes from 2.12x to 2.01x. The FRTB-SA Combined Impact (pre-div) which includes mitigating items prior to applying SBM diversification changes from $638.9 Bn to $598.5 Bn, while the ratio relative to current market risk RWA goes from 1.67x to1.56x. The SBM diversification impact changes from $86.4 Bn to $80.5 Bn. FRTB-SA Combined Impact, which is mitigating items after consideration of SBM diversification goes from $552.5 Bn to $518.0 Bn, while the ratio relative to current market risk RWA goes from 1.44x to 1.35x. Additional ratios impacted by these changes can be found in Appendix 2.

III. Conclusion

The Associations appreciate the opportunity to submit additional comments on the industry response letter. If you have any questions, please contact Lisa Galletta at lgalletta@isda.org or (917) 624-3411 and Guowei Zhang at gzhang@sifma.org or (202) 962-7340.

Very truly yours,

[redacted]

Lisa Galletta
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International Swaps and Derivatives Association, Inc.

[redacted]

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IV. Appendix

A. Annex 1 for Equity Investment in Funds

Table 5 below illustrates a comparison of 99th percentile drawdowns and volatilities (assuming a one month holding period) using the last four years of data on some of the common fixed income ETFs, including S&P 500.

Table 5

	General Information			Standalone Capital		
Fund / ETF	**99 Percentile volatilities**	**Standard Deviation**	**Duration**	**GIRR Delta Capital (% of NAV)**	**CSR NS Delta Capital (% of NAV)**	**Total Standalone FRTB Capital (% of NAV)**
S&P 500	-19.64%	5.67%				
SHY	-0.96%	0.36%	1.86	2%	0%	**2%**
EMB	-9.03%	2.81%	6.76	5%	8%	**13%**
LQD	-8.02%	3.29%	8.43	6%	11%	**17%**
HYG	-12.62%	3.08%	3.55	3%	9%	**12%**

Table 5 (continued)

	Single Equity Treatment	Risk Weight Approach (aggregation in bucket 11)		Duration Approach (not accounting for improved diversification)			
Fund / ETF	**Bucket 11 Capital (% NAV)**	**Bucket**	**Capital (% NAV)**	**GIRR Delta Capital (% of NAV)**	**CSR NS Delta Capital (% of NAV)**	**CSR NS Bucket used**	**Capital (% NAV)**
S&P 500							
SHY	**70%**	IG Sov	**4%**	2%	0%	N/A	**2%**
EMB	**70%**	Speculative & Sub-Speculative Sov	**20%**	5%	32%	19	**38%**
LQD	**70%**	IG Non-Sov	**20%**	7%	12%	18	**18%**
HYG	**70%**	Speculative & Sub-Speculative Non-Sov	**20%**	3%	16%	19	**19%**

B. Impacted Ratios in the January Letter

For a list of the impacted ratios in Appendix 8 of the January Letter, please see below:

Index	Description	Aggregate Value, Change, or Ratio.	Footnote in January Letter
TB_08	Total revised market risk RWA for full portfolio under SA (in $Bn)	~~811~~ **770**	20
TB_08a	Total revised market risk RWA for full portfolio under SA with mitigating items(in $Bn)	~~552~~ **518**	21
TB_09	Percent change of total revised market risk RWA for full portfolio under SA vs. total current market risk RWA	~~112%~~ **101%**	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%~~ **83%**	23
TB_13	Ratio of total revised market risk RWA for full portfolio under SA to total current market risk RWA	~~2.12~~ **2.01**	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~~ **1.35**	37
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%~~ **13%**	46
TB_23	Revised market risk RWA impact of introducing an inter risk-class correlation parameter of 0.5 (in $Bn)	~~86.4~~ **80.5**	47
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%~~ **10.5%**	65