



# BCBS PROPOSES A SIMPLIFIED ALTERNATIVE TO FRTB SBA LOGICAL RESPITE, BUT QUESTIONS REMAIN. IS THIS A BCBS THAW?

REGULATORY PERSPECTIVES

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- **Executive Summary**

On June 29, BCBS released a consultative document for a simplified alternative to FRTB's standardized approach (SA). This revised approach is designed to apply to banks that are not large or internationally active. The proposal allows smaller banks to substitute the sensitivity-based component (SbM) (previously termed by BCBS as SBA) of the standardized approach (SA) prescribed in the January 2016 FRTB standards with a reduced-sensitivities based method (R-SbM). This substitution leaves the remaining SA framework, including default risk charge and residual risk add-on, unchanged. In lieu of the simpler approach, BCBS substantially increased R-SbM risk weights for banks opting for this approach. BCBS is also considering retaining the Basel II standardized approach as another option for smaller banks, but with an upward recalibration to maintain parity.

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Our initial analysis suggests that the proposed R-SbM framework is a logical and overdue respite for smaller banks, but will be costly because of higher capital charges and supervisory constraints on operational flexibility. Notably, the consultative document does not point to any movement from BCBS with respect to FRTB implementation timelines, except to specify that BCBS will consider the target implementation of the finalized R-SbM standard "in tandem with the Pillar 1 implementation date for the broader revised market risk framework."

Comments to BCBS are due by September 27, 2017. In our view, industry comments should center around the logic and feasibility of this approach vis-à-vis SbM, and whether the R-SbM represents sufficient simplification compared to Basel II with a multiplier to be close to parity with FRTB

We believe that BCBS will be assisted in its decision-making through real or stylized small-to-mid-size bank portfolios that could be used to calibrate this new framework.

In this note, we provide highlights of the proposal, as well as our views on R-SbM as a viable choice for banks to adopt. As always, we provide our opinion and our 'reading of the tea leaves' surrounding this proposal from a regulatory perspective.

## • Overview of the Proposal

This proposal comprises a reduced sensitivities-based measurement framework (R-SbM), with the following key simplifications:

1. Removal of capital requirements for vega and curvature risks;
2. Simplification of the basis risk calculation;
3. Reduction in risk factor granularity;
4. Simplification of the correlation scenarios.

SA market risk capital requirement would still be the sum of three components, with the latter two calculated as specified in the FRTB standards:

1. The risk charges under the reduced SbM (R-SbM as proposed in this consultative document);
2. The default risk charge (DRC);
3. The residual risk add-on (RRAO).

Adoption of the R-SbM approach will be an option for banks that meet specified qualitative and quantitative criteria, as approved and overseen by supervisory authorities. BCBS is seeking feedback on the proposed standards, as well as views on whether a recalibrated version of the Basel II standardized approach is a viable alternative for market risk capital requirements.

## • Summary of proposed changes

The general approach in R-SbM is similar to the comprehensive SbM proposed in the January 2016 FRTB standards. The principal changes in

R-SbM are the exclusion of vega and curvature risks, as well as coarser risk factors, buckets, sensitivities and correlation parameters. As compensation for this simplification, R-SbM requires significantly higher risk weights. Delta risk aggregation methodology is identical under both SbM and R-SbM, although calibration is even more prescriptive under R-SbM than under SbM.

### • GIRR (General Interest Rate Risk)

Under R-SbM, GIRR is substantially simplified and more prescriptive. Risk weights for GIRR are 5% across all maturities, compared with SbM weights ranging from 1.5% to 2.4% across maturities that are further divided by square root of two for specified currencies – a process not allowed under R-SbM. This implies more than a two-fold increase in risk weights for R-SbM.

Sensitivities are computed at three intervals across the yield curve set at < 5 year, 5 year and > 5 year tenors. All other methodological prescriptions are essentially the same as in SbM. Risk weights for inflation and cross-currency basis risk factors increase from 2.25% (divided by square root of 2 for specified currencies) under SBA to 3% under R-SbM.

Correlations are also more prescriptive and simplified. Correlation between weighted sensitivities across short and long ends of the yield curve is specified at 20%. Delta risk correlation between weighted sensitivities to inflation curves and underlying yield curves is specified at 40%. Delta risk correlation does not have to be incorporated between weighted sensitivities to a cross-currency yield curve and any other GIRR risk factor. The GIRR correlation parameter for aggregating across buckets under R-SbM is prescribed to be a flat 50%.

### • CSR (Credit Spread Risk) non-securitizations

For CSR non-securitization risk factor, a 1 basis point parallel shift in credit spread is prescribed. This greatly simplifies the SbM methodology in which five individual tenor shifts must be incorporated across 0.5 to 10 years. The number of credit quality buckets is reduced from 16 in SbM to 6 in R-SbM. This should lead to substantial reduction in the effort required for classifying bonds and other credit-sensitive instruments. The buckets are equally divided

across investments and non-investments, and further into sovereign and other government debts, financials and other sectors. The risk weights range from 1% for investment grade sovereigns to 30% for non-investment grade and other sectors, as compared to 0.5% to 12% for SbM – a more than twofold increase.

The correlation parameters are prescribed at 1 where the sensitivities are identical and 35% otherwise – the same as SbM. There are no tenor or basis correlations and underlying sensitivities.

The inter-bucket correlation parameter ranges from 0% to 50% on a 5x6 matrix, compared with 5% to 75% and a larger matrix in SbM.

- **CSR securitizations**

For this factor, banks must compute sensitivity to a 1 basis point parallel increase in the curve for each risk tranche spread curve.

There are 12 buckets in R-SbM for credit quality and sectors compared to 25 buckets in SBA. Each 12 R-SbM bucket is comprised of four sectors (RMBS, non-mortgage retail securitizations, CMBS, and other) for three credit quality bands (Senior Investment Grade, Non-Senior Investment Grade, and High Yield or non-rated). Risk weights are significantly higher than those for SbM.

Correlation parameters for weighted sensitivities between the same buckets are stipulated to be 100%. Correlation parameters within the same tranche that are represented by more than 80% overlap in notional terms are also prescribed at 100%. Otherwise, correlation parameters are set to 40%. The cross-bucket correlation parameter is prescribed as 0%.

- **Equities**

Equity risk factors are spot prices with sensitivity calculated for 1% change in the price divided by 0.01 – the same as SbM. The buckets are reduced from 11 in SbM to 6 in R-SbM and are divided between large cap (4) and small cap (2). The industry sector classification is reduced from 4 to 2 in financials and other sectors, while the advanced and emerging market economies remain the same. The risk weights are not increased significantly—they range from 40% to 70% compared with 30% to 70% in SbM.

The correlation parameter between weighted sensitivities is simplified and ranges from 7.5% to 25% -- the same as in SBA. The cross-bucket correlation is set at 15%.

- **Commodities**

Commodity risk factors are spot prices with sensitivities calculated by a 1% change in spot price – same as SbM. The number and definition of commodity buckets in R-SbM is the same as in SbM, but risk weights are increased by 5% for each bucket. The correlation parameters between weighted sensitivities across buckets is unchanged.

- **FX**

These include the exchange rate of the traded instrument as well as the reporting currency, with sensitivities calculated by a 1% change. The risk weight is set at 45% for all net sensitivities and 32% for specified pairs without the flexibility for banks to divide it by square root of 2. The cross-bucket correlation factor remains the same at 60%.

- **Criteria for banks**

The choice of R-SbM is applicable only to banks that meet qualitative and quantitative criteria described below, as approved by national supervisors with quarterly assessments. The consultative document also states that national supervisors will have the authority to mandate a bank apply the full SBA (with SbM) methodology even if it applies for, and meets, the full criteria for R-SbM.

1. A bank cannot be G-SIB or D-SIB. This is logical, as it would be unsuitable and risky for a bank to be systemically important and yet find it difficult to implement or support SBA/(with SbM). R-SbM is designed to reduce the reporting burden on non-systemically important banks in a manner that does not, on the whole, lead to procyclicality. SIFIs should be expected to implement IMA in most instances and to report both SA and IMA capital charges.
2. Banks must not be engaged in writing options except for back-to-back hedging for deliverable positions. On the face of it, this condition is clearly required to prevent the possibility of inordinate runaway risk. However, this will have to be closely monitored by supervisors to ensure exact



match of positions as well as other risk parameters including greeks.

3. Banks must not use IMA for any regulatory trading desks. This is designed to prevent cross-desk arbitrage.
4. Banks' total non-derivative trading book liabilities, plus the gross fair value of trading book derivative assets, must be less than Euro 1 billion with liabilities to be excluded at their absolute value. This condition is simple, but it can be restrictive for a bank's growth. Furthermore, it does not allow for inflation and is not calibrated to a bank's relative impact on its local jurisdiction. It is likely that banks that are near (or within) the range of this threshold will either not adopt the new methodologies, or will constrain their growth to fall under the limit.
5. No partial use is permitted between R-SbM and SbM. Again, this is intended to deter arbitrage.
6. Banks' total market risk weighted assets (RWA), computed under SBA, divided by its total RWA, is less than 5%. This is intended to ensure R-SbM is applied to lending-centric banks.
7. The bank does not hold correlation trading positions.
8. As noted before, R-SbM is subject to DRC and RRAO.

### • Reading the tea leaves

#### ***A welcome respite that should quell the protests from some constituents***

The proposal for R-SbM, and the possible continued use of a "calibrated" Basel II approach, is intended to mitigate the need for local jurisdictions to make their own simplifications to SBA or to "opt out" of FRTB. To some extent it should quieten the discontent from smaller and/or less complex banks around the globe as well as from jurisdictions that do not have the resources or frameworks to create, administer or monitor the complete FRTB rules. The R-SbM is also intended to address the political concerns in many jurisdictions about the cost of globally-imposed regulation on non-systemic banks, and the implied impact of growth capital formation on the local level.

In our view, R-SbM injects a necessary dose of balance into the FRTB framework and addresses, to some extent, the notion of extremely

challenging implementation for the small bank community. Whether or not the new framework will be sufficient to eliminate the "opt out" noise pervading some jurisdictions is yet to be seen, but we view this as a rational and productive modification to the FRTB standards.

#### ***Moving away from the concept of "credible fallback"***

One of the primary components of FRTB is the creation of the sensitivity-based approach to the standardized model framework. BCBS designed SBA to be risk sensitive in a way that is aligned to advanced models in methodology, yet also capable of being applied uniformly across a wide spectrum of banks with trading operations across jurisdictions.

A significant additional driver was for the new SA framework to become a credible fallback for the Internal Models Approach (IMA) capital charge. The use of the term "fallback" – as opposed to "alternative" – implies that regulatory trading desks (RTDs) under IMA will fall back to the SA standard when approval is withdrawn. With a credible fallback in place, IMA RTDs could be allowed to fail individually, without the pro-cyclical challenges of our current enterprise-wide approach.

This is a logical approach for large banks. IMA desks and banks are required to compute and report SA capital charges as well as IMA capital charges. For SA and IMA charges to be comparable and tractable, they must follow a sensitivity-based approach which is rigorous enough to be comparable.

The concept of a fallback does not apply to banks or RTDs that are small and/or simple. For these banks, consideration of IMA is not in the cards for the foreseeable future. If a bank does not see a scope for adopting the IMA approach, the concept of a credible fallback is meaningless. From the regulators perspective, small and/or simple banks do not individually pose a systemic threat, and so should be allowed to employ simpler trading models as long as capital attributed to those operations is sufficiently robust. From this perspective, positioning the construct of SBA away from a credible fallback is logical and necessary for FRTB to be applicable for a large subset of banks across all jurisdictions. For these banks, the consideration of the simplified alternative is a much-needed respite.

### ***Calibration of capital charge***

The question of calibration of capital charge under the R-SbM with SbM is a significant one. From our initial estimates, the capital charge under R-SbM will be significantly higher than existing SA (which in itself has been estimated to be 50SbM-100% higher than current Basel II).

Banks that choose to adopt R-SbM will be materially smaller and simpler than those that opt for SbM/SA and IMA. Is it logical to assume that these banks – which clearly face less complex risks – will be assessed a higher capital charge only because they are using a simpler approach? It remains to be seen how and to what extent the R-SbM will impact the capital charge and the calibration for application of the multiplication factors.

### ***Is this a thaw in BCBS approach to original FRTB standards?***

This consultative document is a clear and logical realization by BCBS that the prescribed SbM under SA is difficult to implement and not necessarily appropriate to adopt across all jurisdictions. This is in line with the US Treasury's latest proposal for studying the impact of FRTB in greater detail, specifically as it applies to small banks with relatively simple business models and operations.

The BCBS proposals are a logical respite for smaller banks in terms of adopting and implementing FRTB, but not necessarily a thaw in BCBS' response to addressing the likely challenges faced by small- to medium-sized banks and smaller and/or less complex jurisdictions with size and complexity towards the middle range.

It is unclear if this consultative proposal represents a thaw in BCBS' stance towards FRTB standards and its generally stoic response through FAQs. It remains to be seen if BCBS will consider other apparent challenges that banks are likely to face for computational capacity, PnL attribution test, non-modellable risk factors, implementation dates, capital floor, and others.

### ***Implementation timeline***

Importantly, this consultative proposal is silent with respect to the flexibility of implementation deadlines. At first glance the language implies that the implementation schedule will not be extended. The consultative document states that BCBS intends for R-SbM to be effective concurrent with the implementation date for the FRTB framework. Considering that several medium and large jurisdictions (including US, Europe, Canada and Australia) have announced delayed or phased-in implementation of FRTB, it remains to be seen if BCBS will also signal flexibility in the timelines for implementation.

### ***Remaining questions***

While less complex than SbM, it remains to be seen if R-SbM is simplified enough for small banks. While the vega and curvature sensitivities have been excluded, the number of vertices have been reduced, and the correlation matrices have been simplified, banks currently on Basel II will still have to implement sensitivity-based computation platforms. This may yet prove to be an untenable cost for the smallest and/or simplest banks in many jurisdictions.

We expect to conduct and publish a more comprehensive study during the BCBS comment period.