

NVB response

Consultation by Basel Committee on Banking Supervision Revisions to the minimum capital requirements for market risk

NVB position:

We welcome the consultation paper, which addresses several important issues of the FRTB framework.

This is an additional comment to the response of the EBF, which we fully support. However we do have a single, but important addition, to that of the EBF, which we were not able to share with the EBF due to timing constraints.

Default risk charge (DRC) for non-securitisations

For an option on an equity index, paragraph 138 (d325) requires that the JTD amounts for individual constituent issuer legal entity should be determined by applying a look-through approach. In the related FAQ document (d395¹), the answer to question 1 in Section 1.9 explains that "The JTD equivalent is defined as the difference between the value of the security or product assuming that each single name referenced by the security or product, separately from the others, defaults (with zero recovery) and the value of the security or product assuming that none of the names referenced by the security or product default".

For index options, this approach can lead to JTD amounts of which the sum exceeds the maximum possible loss/gain that can be incurred on the option position. As an example, consider a long position in a call option on an equity index, where the index consists of 100 equally-weighted constituents. The JTD amounts for each index constituent corresponds to minus the delta of the option (calculated from 1 percentage point change in the index spot price). This minus delta (or JTD) for each index constituent times 100 can easily exceed the call option premium. This is not logical since at most the option premium is at stake. In general, the required approach can lead to an under- or overestimation of JTD losses/gains.

Paragraph 146 (d325) states that "...the JTD for all exposures of maturity less than one year and their hedges are scaled by a fraction of a year. No scaling is applied to the JTD for exposures of one year or greater." In the related FAQ document (d395), the answer to question 2 in Section 1.9 explains that "...There is no discretion permitted to assign cash equity positions to any maturity between three months and one year. In determining the offsetting criterion,

¹ <https://www.bis.org/bcbs/publ/d395.htm>

paragraph 148 specifies that the maturity of the derivatives contract be considered, not the maturity of the underlying instrument.”

The delta exposure resulting from a position in equity-index options is frequently hedged with index futures. While such options may have maturities extending well beyond the one-year horizon, the liquid equity index futures usually have much shorter maturities (usually three months at most). At index future expiration, index futures are rolled to the next liquid maturity to keep the delta exposure hedged. According to the regulations, no maturity scaling should be applied to the index options if they have a maturity of one year or longer, while the index futures for delta hedging is subject to maturity scaling. This may result in a fake open risk position.

The requirement for look-through for the default risk charge in case of derivatives on an equity index will be a significant operational challenge. Banks will face at least the following issues:

- Index constituents are not freely available for all indices
- Index constituent weights are not freely available
- Index constituent credit ratings are not available for all issuers
- Multiple stock listings of a particular issuer
- To obtain and maintain this information will likely be expensive, and will require maintenance whenever the composition of an index changes.

Furthermore, it's not clear whether all index providers provide the required information (even at a cost).

In addition to obtaining and maintaining this index constituent information, there is the operational challenge of applying the look-through approach for derivatives on an equity index. It is not uncommon to have derivatives on indices with many constituents (such as the Russel 2000 and S&P 500 indices). The result is that the number of issuers can quickly increase to a large number, accompanied by an increased operational risk.

From an equity-index derivative trading point-of-view, this bottom-up approach seems like an inconvenient and impractical way of measuring the default risk charge, and could lead to a disconnect between the front office trading activities and the capital calculation thereof. An approach focused on index levels, such as shocking indices and repricing the derivatives on them, would be more practical, cheaper, economically more realistic, and would obtain the same objective. An approach along the lines of the EBA ITS CRR Article 344 regarding diversified equity indices might be more practical.