Minimum Capital Requirements for Market Risk:

A comparison of the Basel Committee and European Banking Authority requirements

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Introduction

In January 2019, the Basel Committee (BCBS) finalised its revised international standard on minimum capital requirements for market risk, which opened the channel for other supervisory authorities to consult at national/regional level. In the second half of 2019, the European Banking Authority (EBA) published draft consultation papers, resulting in the final publication in March 2020 of three regulatory technical standards (RTSs) on:

- Liquidity Horizons (LH) for Internal Model Approach (IMA)
- Backtesting (BT) and Profit & Loss Attribution (PLA); and
- Risk Factor Eligibility Test (RFET)

To assist KPMG member firms’ clients in interpreting the BCBS and EBA RTS requirements, this paper sets out the differences in minimum capital requirements for the three finalised RTSs and what this means for firms. We also introduce a KPMG-developed rules decomposition accelerator.

1 Earlier version of the standard published in January 2016: https://www.bis.org/bcbs/publ/d352.pdf
Summary of number of changes made under EBA RTGs

Our comparison of the requirements of the three EBA RTGs to the BCBS requirements can be summarised as follows:

<table>
<thead>
<tr>
<th>Requirements</th>
<th>LH</th>
<th>BT &amp; PLA</th>
<th>RFET</th>
</tr>
</thead>
<tbody>
<tr>
<td>No change – the requirements have remained the same</td>
<td>10</td>
<td>28</td>
<td>18</td>
</tr>
<tr>
<td>New requirement – requirements have been added in the EBA RTS</td>
<td>0</td>
<td>7</td>
<td>5</td>
</tr>
<tr>
<td>Amended wording – there have been minor changes to the wording</td>
<td>1</td>
<td>7</td>
<td>3</td>
</tr>
<tr>
<td>Amended requirement – the requirements have changed significantly</td>
<td>2</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>13</strong></td>
<td><strong>45</strong></td>
<td><strong>26</strong></td>
</tr>
</tbody>
</table>
The following tables summarise the key differences between the BCBS January 2019 and the EBA RTS requirements, and the implications that these could have for firms:

### 1) RTS - Liquidity Horizons for Internal Model Approach (IMA)

<table>
<thead>
<tr>
<th>Topic</th>
<th>Differences</th>
<th>Implications</th>
</tr>
</thead>
<tbody>
<tr>
<td>Currency Pairs</td>
<td>EBA introduces additional currency pairs as most liquid: USD/DKK, JPY/DKK, CHF/DKK, and GBP/DKK</td>
<td>Including domestic currencies of EU member countries along with EURO as most liquid reduces the liquidity horizon requirement which eliminates the need for additional capital.</td>
</tr>
<tr>
<td>Large capitalisation</td>
<td>EBA has set a threshold of EUR 1.75 billion versus BCBS’s USD 2 billion for large capitalisation. However, in order to better reflect the EU capital market, EBA introduces an additional optional provision for an equity that is a constituent of indices in Annex I of Commission Implementing Regulation (EU) 2016/1646 to be considered large cap.</td>
<td>The EBA alternative provision for an equity to be considered a large cap reflects the diverse EU capital market better than categorizing large cap equity solely based on market cap limit. In the absence of this provision, a substantial number of equities from small EU member states would not exceed the market cap threshold of EUR 1.75 billion.</td>
</tr>
</tbody>
</table>
| Mapping for index instruments| Mapping of risk factors related to index instruments has been specified explicitly compared to BCBS:  
  a) map the risk factor to the broad risk factor category corresponding to the risk embedded in the homogenous index.  
  b) compute the weighted average of the liquidity horizons by first multiplying the liquidity horizon of each individual constituent of the index by its weight in the index and then by summing the weighted liquidity horizons for all constituents of the index.  
  c) map the risk factor to that subcategory, among those belonging to the broad risk factor category identified in accordance with point (a), that has the shortest liquidity horizon which is greater or equal to the liquidity horizon identified in accordance with point (b).  
  d) where the risk factor is the price of a homogenous index made of bonds and indices composed by bonds only, the institution shall map that risk factor to the credit spread broad risk factor category. | The EBA considered the potential operational burdens that treatment of homogeneous indices might cause to some institutions. In order to reduce these burdens, the EBA has made its proposed methodology a possible rather than a mandatory treatment and allowed institutions to opt for a simpler approach. |
2) RTS – Backtesting (BT) and Profit and Loss Attribution (PLA)

<table>
<thead>
<tr>
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<th>Implications</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>BT: Actual P&amp;L (APL) and Hypothetical P&amp;L (HPL)</strong></td>
<td>EBA RTS allows institutions to use either the trading positions that are in the scope of IMA or the entire portfolio of positions, i.e. both SA and IMA, to compute the adjustment in the APL and HPL for group level backtesting purposes.</td>
<td>Additional option to apply adjustments for the APL-BT and HPL-BT is included - some banks may find it more convenient to apply adjustments using the combined portfolio of IMA and SA desks, and others to use just the IMA desk positions.</td>
</tr>
<tr>
<td><strong>BT: Documentation</strong></td>
<td>EBA RTS explicitly states [Article 5 of EBA RTS on BT &amp; PLA] what documentation banks should have, including details of how to calculate the adjustments made in the APL and HPL.</td>
<td>Specifics of the stated documentation will require banks to streamline their reporting infrastructure and data retention policy.</td>
</tr>
<tr>
<td><strong>PLA: Additional zone</strong></td>
<td>Under the traffic light approach, EBA has introduced yellow and orange zones and removed the amber zone. The yellow zone is equivalent to the amber zone as defined in the BCBS standards. The orange zone is defined for those desks that did not calculate own funds (IMA) in the previous quarter and do not qualify for the green zone.</td>
<td>The orange zone is essentially a pre-IMA status. The desk needs to start out as SA before transitioning to IMA, so a special traffic light colour is created for this. Overall, not a significant change. The orange zone is an improvement in clarity, though it is implicit in the BCBS texts.</td>
</tr>
</tbody>
</table>

3) RTS - Risk Factor Eligibility Test (RFET)

| Verifiable/real price | EBA explicitly specifies that, if transactions are committed with the sole purpose of meeting the required number of verifiable/real prices specified under RFET, prices will not be considered real/verifiable. Observation date of real prices retrieved from data sources across different time zones shall be recorded based on a consistent single time zone. This is a new requirement for EBA. | No benefit or incentive to the banks to commit transactions solely to meet the required number of verifiable/real prices. Although EBA standards bring consistency, prescribing that real price observation date should be recorded based on consistent single time zone will result in additional operational cost and infrastructure requirements for banks. |
### 3) RTS - Risk Factor Eligibility Test (RFET)

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</tr>
</thead>
<tbody>
<tr>
<td>Third party vendor</td>
<td>Vendors that provide real prices to the bank will be subject to an external audit at least annually.</td>
<td>This will ensure that the data is valid and audited.</td>
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<tr>
<td></td>
<td>In contrast to the BCBS standard, the EBA RTS specifies that the vendor must provide the bank with the information/audit report that a price is verifiable as long as the vendor is contractually obliged to verify itself that a price is verifiable.</td>
<td>EBA RTS give banks some flexibility in relation to verifiable price and third-party data vendors.</td>
</tr>
<tr>
<td></td>
<td>The EBA RTS allows the bank to allocate a verifiable price to a bucket corresponding to a risk factor belonging to that bucket regardless of whether that risk factor is included in the risk-measurement model.</td>
<td>It allows the banks to use vendor data even if the vendor cannot provide the bank with reports confirming whether the price is verifiable. However, the vendor must be subject to external audit at least annually.</td>
</tr>
<tr>
<td></td>
<td>EBA has set out explicit documentation requirements as part of banks’ internal policies relating to verifiable price and bucketing approach.</td>
<td>This will help banks to access a greater number of data providers, which may help to increase the availability of verifiable prices.</td>
</tr>
<tr>
<td>Bucketing</td>
<td></td>
<td>The EBA RTS allows more flexibility in the allocation of verifiable price to a bucket and hence may help the banks by making such buckets less non-modellable.</td>
</tr>
<tr>
<td>Documentation</td>
<td></td>
<td>The specifics of the necessary documentation will require banks to streamline their reporting infrastructure and data retention policy.</td>
</tr>
</tbody>
</table>
How can KPMG help?

KPMG member firms have established teams of specialists who are available to support banks across a wide range of financial risks. KPMG’s expertise and global network mean that we can assist you wherever your business is based.

KPMG risk professionals have developed a rule decomposition accelerator to support FRTB change programs in managing and monitoring progress on implementation of the applicable rule set.

KPMG has developed a rules decomposition accelerator designed to help banks to:

- Understand the decomposition of BCBS FRTB rules
- Manage rule ownership assignment
- Conduct BCBS FRTB rules compliance check at any point in time
- Conduct high level impact assessment for their operating model, across data, systems and processes, controls and policies to inform scale of change work required
- Conduct a gap analysis of FRTB BCBS to CRR2 (with functionality to add other global FRTB regulations to understand the delta and implications for their business and operating model)
- Manage and monitor rule traceability from rules to business requirements, functional requirements and UAT.
KPMG professionals can also assist banks by:

— Advising on the structure of their market risk management function and market risk models to improve decision-making and the integration of various components of the financial risk spectrum.
— Reviewing market risk frameworks to incorporate the new requirements while helping to ensure that they remain fit for purpose for current regulatory requirements.
— Helping to prioritise efforts on those aspects of the requirements that are good practice and represent ‘no regrets’ choices, such as:
  – Data cleansing (quality) and alignment (Front Office and Risk) including product/risk factor taxonomies (which in turn supports risk data aggregation and reporting);
  – Front Office data granularity (risk factor level) and availability of data;
  – Enhancing model governance; and understanding modelling differences across Front Office, Risk and Finance (which in turn supports Model Risk Management);
  – Assessing regulatory and other programme overlaps and potential efficiencies (e.g. IFRS9);
  – Developing roadmaps for implementation and the potential operating model to aid accelerated roll out;
  – Standardised modelling capabilities; and
  – Building out secondary considerations and effects, such as capital allocation.
Contacts

For more information on the EBA RTS or BCBS requirements or to discuss the Rule Decomposition Accelerator, please contact:

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