Stand out for the right reasons
Financial Services Risk and Regulation

Hot topic

Operational risk – a single standardised approach for all

The Basel Committee (BCBS) published its outstanding Basel III post-crisis regulatory reforms on 7 December 2017. These reforms include the revised Standardised Approach (SA) to operational risk and follow the March 2016 consultation. The changes are due to take effect from 1 January 2022. The reporting implications of these changes are expected to be dealt with in a third phase of revisions to the BCBS’ Pillar 3 disclosures Standard.

The financial crisis showed that capital requirements for operational risk turned out to be insufficient to cover the related losses incurred by some firms. It also demonstrated the difficulty of using internal models to estimate operational risk capital requirements given the nature of these losses such as misconduct and inadequate systems and controls. BCBS replaces the internal model based Advanced Measurement Approach (AMA) and the 3 existing Standardised Approaches with a single risk-sensitive standardised approach to be used by all firms.

More specifically the revised SA has the following features an operational risk capital requirement that is based on a measure of a bank’s income (the business indicator component), and on a measure of a bank’s historical operational risk related losses (an internal loss multiplier):

- the business indicator component (BIC) incorporates business indicators (BI) relating to various financial reporting, mainly income, measures; and
- the internal loss multiplier (ILM) is based on historical operational loss experience relative to the BIC.

Set out below is a section that outlines the main features of the finalised revised SA followed by a section that summarises the changes made since the March 2016 consultation.
**Finalised SA**

Conceptually the finalised SA assumes that operational risk increases at an increasing rate with a firm’s income. It also assumes that firms that have experienced greater operational risk losses in the past are more likely to experience operational risk losses in the future. The operational risk capital requirement (ORC) can be summarised as follows:

\[
\text{ORC} = \text{BIC} \times \text{ILM}
\]

**Business indicator component (BIC)**

The BIC is the sum of 3 components: the interest, leases and dividends component; the services component and the financial component, all calculated as averages over 3 years.

The formula for the BIC is:

\[
\text{BIC} = \sum (\alpha_i \times \text{BI}_i)
\]

\(\alpha_i\) is a coefficient increasing in magnitude and applied based on the size of the BI measure in 3 ‘buckets’. A summary is set out in the table below:

<table>
<thead>
<tr>
<th>BI Bucket</th>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>BI Range</td>
<td>≤ €1bn</td>
<td>€1bn &lt; BI ≤ €30bn</td>
<td>€30bn</td>
</tr>
<tr>
<td>Marginal BI coefficient ((\alpha_i))</td>
<td>0.12</td>
<td>0.15</td>
<td>0.18</td>
</tr>
<tr>
<td>Example: BI of €35bn BIC = sum of buckets 1-3 = €5.37bn.</td>
<td>€1bn x 12%</td>
<td>€(30-1)bn x 15%</td>
<td>€(35-30)bn x 18%</td>
</tr>
</tbody>
</table>

The ILM increases as the ratio of LC:BIC increases although at a decreasing rate as illustrated in the graph below.

\[
\text{ILM} = \ln (\exp(1) - 1 + (\text{LC}/\text{BIC})^{0.8})
\]

BCBS has calibrated the ILM formula so that where LC = BIC, the ILM factor is equal to 1 and in effect it becomes the default ILM level in certain circumstances:

- the ILM is set to 1 for firms with BI levels less than €1bn although national supervisors may choose to apply the ILM calculation to all firms in their jurisdiction;
- national supervisors may set the ILM to 1 for all firms in their jurisdiction;
- firms that do not meet operational risk data maintenance standards must have an ILM set to at least 1 but with national supervisory discretion to set higher levels; and
- under transitional arrangements, firms who don’t have 5 years of loss data of adequate quality, must set their ILM to 1 although national supervisors may require firms use their calculated ILM factor where this is greater than 1.

**Internal losses multiplier (ILM)**

The formula¹ for calculating the ILM is a function of the BIC and the Loss Component (LC), where the latter is equal to 15 times a firm’s average historical operational risk losses over the preceding 10 years. Transitional arrangements allow firms who don’t have 10 years of loss data to maintain an appropriate standard to use a minimum of 5 years data.

**Loss data identification, collection and treatment**

The SA requires loss data to be identified, collected, treated and maintained to high standard. This involves appropriate associated systems and controls that are subject to independent review by internal and/or external audit functions. The quality of data should also be reviewed by national supervisors.
The revised approach also specifies a range of requirements relating to:

- the expected data attributes to be collected such as the dates the events occurred, were discovered and accounted for together with their nature and causes;
- the mapping of loss data to the Basel supervisory loss types; and
- the exclusion from operational loss data sets of operational loss events related to credit risk that are reflected in credit risk weighted assets.

**Disclosure**

Whilst BCBS intends to undertake a separate consultation on Pillar 3 operational risk disclosure templates, it already specifies areas where it expects disclosure to be required.

All firms with a BI > €1bn or which use loss data in the calculation of operational risk capital must disclose the annual loss data used in the ILM for each of the 10 years of the calculation window. This includes reporting loss data on both a gross basis and after recoveries and exclusions. This includes firms whose national supervisor has set ILM equal to 1 for all firms in their jurisdiction. By implication, disclosure of loss data of less than 10 years is permissible under the transitional arrangements, given the acceptability of 5 year periods for ILM calculations.

The exclusion of internal data due to non-compliance with loss data standards (and by implication the unavailability of data), and the application of any resulting ILM must also be disclosed.

**All firms must also disclose each of the BI sub-items for each of the 3 years of the BIC calculation period. Changes from consultation**

**Exclusions and calibration**

Firms can now exclude certain operational losses from the 10 year average, subject to supervisory approval, where the loss events are no longer relevant a firm’s risk profile. BCBS expects these exclusions to be rare and firms will need to demonstrate that the loss events have no relevance to other continuing activities or products. Similarly, firms may exclude divested businesses or activities from the BI calculations, subject to supervisory approval and corresponding Pillar 3 disclosure. Loss events and BI amounts relating to acquired businesses must also be incorporated into the 10 and 3 year average calculations respectively.

The overall effect of the ILM is that the operational risk capital requirement increases with increasing past losses. However, BCBS have now included a dampening factor in the ILM formula decreasing the rate of increase. It has also made a number of simplifications and other changes to the calibration of the calculation including:

- reducing the number of BI buckets for the purposes of applying the marginal BI coefficient (α) from 5 to 3;
- reducing the range and level of the marginal BI coefficient (α) from 0.11–0.29 to 0.12–0.18 and eliminating a constant term from the calculation for each bucket; and
- amending the LC calculation from a multi component calculation taking into account losses of different sizes to a simpler 15x multiple of average operational risk losses.

**Data standards**

Changes to the standards for the use of loss data under the finalised SA include:

- loss data should be based on losses net of recoveries, but recoveries are not recognised until they are received. In the consultation, recoveries were not recognised;
- the minimum threshold for the inclusion of loss data has increased from €10,000 to €20,000 and up to €100,000 for larger firms with supervisory approval; and
- independent review is required for loss data systems and controls by internal and/or external audit functions.

The finalised SA makes it clearer that the basis for recording losses is the date of accounting recognition (ie the date(s) on which the loss is recognised in the income statement) and that losses caused by a common or related operational risk event but accounted for over several years, should be allocated to the corresponding year in the loss database in line with the accounting treatment. In the consultation there was a choice between date of discovery and date of accounting and common or related losses were to be grouped and recorded as a single loss.

The disclosures included in the finalised SA are also changes since the consultation
What does this mean for firms?

The volume, granularity and the time horizon (e.g., the 10-year operational loss observation window) of data that needs to be identified, collected, and maintained is set to increase substantially under the finalised revised SA. This is relevant to both for operational risk capital requirement calculation purposes and for Pillar 3 disclosure purposes. This is likely to result in additional operational complexity and represents a significant change for firms currently using the existing Standardised Approaches. Very few firms currently using the Advanced Approach may already partially address these requirements as part of their operational risk management framework required under Basel II and their existing reporting of operational risk losses national supervisors. But firms will still need to consider enhancing their data collection and maintenance capacity and systems well ahead of January 2022.

The finalised revised SA includes data standards for the use of loss data with corresponding requirements for related systems and controls. These are set to be subject to supervisory review. There are also internal audit and/or external audit review requirements over these systems and controls. This may lead to a need to enhance relating systems and controls including to governance arrangements with a related increase in operating costs.
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