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Abstract

As part of their current target of making capital modelling more transparent, simple and consistent across different banks, the Basel Committee on Banking Supervision (“BCBS”) has proposed the Standardised Measurement Approach (“SMA”) as a single and non-model based method for assessing operational risk and calculate Pillar I capital requirements, replacing all four approaches currently in place. It relies on a business indicator (based on the three main sources of income) and the past performance of the financial institution reflecting the institutions loss history.

The SMA is expected to establish consistency regarding the regulatory capital measurement for operational risk, to promote comparability of risk-based measures and to reduce the model complexity.

Details on the further course of action and calculation approach were supposed to be part of the G20 summit in Hamburg in June 2017. And although rumours exist on a pending update of the framework, no reconditioning was done in this context.

Background

Consistency, simplicity and risk sensitivity

In order to address these objectives, the Basel Committee on Banking Supervision published its second consultative document “Standardised Measurement Approach for operational risk” in March 2016.¹ The first paper, published in October 2014, faced severe criticism by the industry, mostly due to its strong orientation towards universal banks.

The proposal replaces the existent Pillar I measurement approaches being used today,

- The Basic Indicator Approach (“BIA”),
- The Standardised Approach (TSA), and
- The Advanced Measurement Approach (AMA),

with a single Standardised Measurement Approach for operational risk. The main driver for the proposal is based on the inherent complexity of the AMA and the lack of comparability arising from a variety of internal modelling practices, which have exacerbated variability in risk-weighted asset (RWA) calculations and eroded confidence in risk-weighted capital ratios; while the BIA and TSA are lacking risk sensitivity.

Overview of Proposed Changes

The second consultative document for the SMA (prior RSA²) introduces a more risk-sensitive standardized approach, which is expected to ensure a greater comparability and includes besides a modified version of the Business Indicator (BI) from the first consultation³, a bank’s specific loss-data profile, reflected in the Internal Loss Multiplier (ILM).

¹ The first consultative document for the “Standardised Measurement Approach for operational risk” was published by the BCBS in October 2014. The second consultative document BCBS d355 is available at www.bis.org/bcbs/publ/d355.htm

² Revised standardised approach (RSA)

³ It is worth mentioning that in response to comments received during the first consultation, the BCBS removed existent discrimination against different business models under the RSA and adjusted the structure of the BI. These modifications include among other things an adjusted treatment of operating lease business models (net perspective) and an additional consideration of a dividend income. The first consultative document BCBS d291 is available at www.bis.org/publ/bcbs291.htm

The formula is defined as:

$$Capital_{SMA} = 110 \text{ m.} + (BI \text{ component} - 110 \text{ m.}) \cdot \underbrace{Ln\left(e^1 - 1 + \frac{LC}{BIC}\right)}_{ILM}$$

The BI upholds in its primitive form almost the same P&L items related to activities producing operational risk that are found in the composition of Gross Income (GI). The main difference is based on the methodology for the combination of relevant items.⁴

The BI divides banks into five buckets depending upon the size of calculated BI, where each bucket has an associated increasing function of the BI and specifies a bank's BI component (BIC) (see Table 2). The BIC itself is defined by the weighted sum of BI buckets, where the assigned weight for each bucket increases progressively.

Table 1: Overview BI Component

Bucket	BI Range	BI Component ⁵
1	€0 to €1 bn.	0.11 * BI
2	€1 bn. to €3 bn.	€110m + 0.15 * (BI - €1 bn.)
3	€3 bn. to €10 bn.	€410m + 0.19 * (BI - €3 bn.)
4	€10 bn. to €30 bn.	€1.75 bn. + 0.23 * (BI - €10 bn.)
5	≥ €30 bn.	€6.34 bn. + 0.29 * (BI - €30 bn.)

Source: BCBS Consultative Document: Standardized Measurement Approach for operational risk, March 2016

The previously illustrated formula for the SMA capital requirement is valid for banks with a BI figure falling into the range of bucket 2 or higher. Thus, in case that a banks BI figure lies within the range

of bucket 1, the SMA capital is an increasing linear function of the BI and does not depend on the ILD. However, the ILM depends on a bank's internal losses – due to the loss component (LC) – as well as the BIC and adds an idiosyncratic, risk sensitive component to the framework.

The LC reflects the operational loss exposure of a bank and should contain 10 years of good-quality loss data (see Section "Loss Data under the SMA"), where loss events are discriminated by different levels:

$$LC = 7 * Avg. Total Annual Loss + 7 * [Avg. Total Annual Loss | LE > €10 \text{ m.}] + 5 * [Avg. Total Annual Loss | LE > €100 \text{ m.}]$$

Loss Data under the SMA

As previously noted a bank with a BI figure falling into bucket 2 or higher is required to use loss data as a direct input to the proposed SMA capital calculation and thus, the quality and integrity of the data are crucial to generating SMA outcomes aligned with the bank's operational loss exposure.

However, the main drivers for the proposed minimum standards (see below) are to promote consistency in the implementation of the LC and to prevent gaming of loss data collection and reporting. Banks failing to meet the defined standards would be required to uphold SMA capital at a minimum equal 100% of the BIC.

Last named aspect provides on the one hand an incentive for banks with heavy losses not to meet the qualitative requirements and therefore, to reduce the SMA capital outcome. To address such cases, the Basel Committee emphasizes that supervisors will ensure that such banks apply a multiplier to the BIC which is also disclosed.

On the other hand, banks with a low risk profile are keen to meet at least the minimum standards, as they would face a lower LC and coupled with this a lower SMA capital outcome.

⁴ Please note that each item represents an average for the years: t, t-1 and t-2

⁵ The BIC reflects the operational loss exposure of an average QIS bank of a given size, which was calibrated by the BCBS using QIS data collected in the second half of 2015.

Minimum Loss Data Standards:

- A minimum of 10 years of ILD⁶.
- Documented procedures and processes for the identification, collection and treatment of ILD.
- Mapping of ILD to relevant Basel business line categories and Level 1 risk event categories as well as documented criteria for allocating losses to the specified loss event types.
- A de-minimize gross loss threshold of €10,000⁷.
- Information on gross loss amount, recoveries as well as descriptive information about drivers or causes of the loss event.
- Information regarding “date of occurrence”, “date of discovery” and “date of accounting”.
- Specific criteria for assigning loss data arising from an event in a centralized function.
- Treatment of operational risk losses related to credit risk or market risk (boundary risk events).
- Policies and procedures for the integration of ILD in the SMA loss data set (loss data set for the calculation of SMA regulatory capital).

Impact on Financial Institutions

The BCBS aims for an approach, which does not significantly increase the overall capital requirement for operational risk. It believes that the capital requirement under the new operational

risk framework will vary from bank to bank and might lead to an increase in minimum capital requirements for some banks.

The Operational Risk data eXchange Association (ORX) conducted a study in June 2016 regarding a potential capital impact on banks and analysed data submitted by 54 financial institutions, including 16 systematically important banks.

The study indicates that 75% of banks would see an increase in capital, which equates an additional €115 bn. Pillar 1 capital. Especially European banks would face, with a 63% higher capital charge on average, the biggest increase under the SMA.

The main conclusion of the study is, however, that bank size appears to be the biggest determinant of capital levels under the proposed framework, as larger banks would hold proportionally more operational risk capital compared to the current regulatory approved capital. This can be derived from the fact that high single losses are weighted comparably heavily and therefore lead to over proportional capital requirements. The largest impact arises from the LC.

Since the LC constitutes a key factor for the operational risk capital requirements, banks currently applying the BIA or TSA face an additional burden with respect to the minimum loss data standards. It will be required to put the necessary systems and processes in place in order to collect, analyse and report the ILD. But even banks currently adopting the AMA may have to adjust their systems and processes to perform last notified duties in order to calculate the LC.

Latest Developments

In the light of the capital impact and the requirement on ILD, more and more criticism arises against the proposed SMA framework. And yet, one year after the consultation phase, no information concerning possible changes are given by the BCBS. Only rumours regarding a leaked letter from the outgoing committee chairman Stefan Ingves buzzing around.

According to recent developments, it seems that the BCBS intends to leave the decision for an inclusion of ILD up to national jurisdictions. But, at the same time it is emphasised that even if

⁶ A five-year observation period is acceptable, if the bank first moves to the SMA.

⁷ A de-minimize gross loss threshold of €20,000 is acceptable, if the bank first moves to the SMA.

some jurisdictions exclude the loss history from the SMA capital calculation, banks will be required to disclose their ILD.

However, a possible exclusion of ILD from the SMA capital calculation would lead to an approach where capital is purely a factor of size and thus no risk sensitivity is included under Pillar 1 for the operational risk category.

In addition, the leaked letter indicates that the number of existent buckets will be reduced from 5 to 3, and associated therewith; the maximum weight coefficient is trimmed from 29% down to 18%. A result of illustrated modifications would be a possible lower capital impact compared to the SMA proposal published in 2016.

Nevertheless, it remains to be seen when the BCBS publishes its final proposal for operational risk capital requirements and to what extent the modifications are. Due to required integration of the standard in national law and the already existing time gap since the publication an entry into force is not to be expected before 2019, which is further supported by a voluntary phase-in of seven years.

To assess the impact institutions should anyhow perform a comparative calculation, which is opposed to the allocation of included P&L items rather simple. This calculation will support the forward looking capital planning prior to the final implementation within regulatory standards and give an insight into impacts on the specific institution. Additionally the granularity and extent of existing loss data should be analysed to prepare for the changes.

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