KPMG

Implementation of Basel IV Standardised Approach for Operational Risk ("SAOR")

January 2021

Overview of the Standardised Approach

The Basel Committee on Banking Supervision (BCBS) finalised the new Standardised Approach for operational risk capital ("new SAOR") in December 2017. The new SAOR for measuring minimum operational risk capital requirements is a non-model based method and it will replace all three existing approaches for operational risk under Pillar 1.

Due to COVID-19 the Basel effective date for the new SAOR is postponed to January 2023. In November 2020, the HKMA released their consultation paper for local implementation and the framework and timeline basically align with Basel's.

Components of the New Standardised Approach

The new SAOR consists of two main components – a Business Indicator Component (BIC) (a measure of a bank's income) and a Loss Component (LC), from which an Internal Loss Multiplier (ILM) is derived (a measure of a bank's historical losses). The minimum (Pillar 1) operational risk capital requirement (ORC) is the product of the BIC and the ILM, with risk-weighted assets for operational risk being this capital requirement multiplied by 12.5.

Business Indicator

The Business Indicator (BI) is the sum of the interest, leases and dividend component (ILDC), the services component (SC), and the financial component (FC), which are defined as:

ILDC = Minimum (**Absolute Value [Interest income – Interest expense]**; 2.25% ***Interest earning assets**) + **Dividend income**

SC = Maximum (**Other operating income**; **Other operating expense**) + Maximum (**Fee income**; **Fee expense**)

FC = **Absolute value (Net P&L Trading book)** + **Absolute value (Net P&L Banking book)**

(The values highlighted in bold are calculated as the average over the past three years)

Business Indicator Component

To calculate the BIC, the BI is allocated to three buckets and the marginal coefficient applied, as shown in the table below. The marginal coefficient is applied on increasing portions of the BI. This approach resembles common tax formulas with progression schemes.

For example, a BI of HKD 350 billion will have a BIC of HKD 53.7 billion ((10*12%)+(300-10)*15%+(350-300)*18%).

Bucket	BI range (in HKD billions)	BI marginal coefficient
1	10	12%
2	10 <BI 300	15%
3	>300	18%

Internal Loss Multiplier

A bank's internal operational risk loss experience affects the calculation of operational risk capital through the ILM. The LC is defined as 15 times the average annual operational risk losses over the previous 10 years (with a minimum of five years during the transition to the SA). This component introduces some risk sensitivity into the approach. The Internal Loss Multiplier (ILM) is calculated from the LC and BIC by the following formula:

$$ILM = ln\left(exp(1) - 1 + (\frac{LC}{BIC})^{0.8}\right)$$

The HKMA further proposes that a bucket 2 or bucket 3 AI not meeting the minimum data quality standards must apply an ILM of 1.25 to calculate its operational risk capital requirements. When an AI moves from bucket 1 to bucket 2 or 3, it will be given a grace period of 9 months within which even if it does not meet the minimum data quality standards, the applicable ILM is 1.

Implications and Challenges for Banks

The implementation of the new SAOR will have potential impacts on the bank's data, systems and processes, business models and capital calculations.

Data, Systems and Processes

- Banks will have to ensure their internal LC processes are sufficiently robust and cover the required ten-year history. The materiality threshold for LC has been set at HKD 200,000. These LC requirements are more detailed and onerous than currently required for BIA or TSO/ASA, including expectations of formal independent review of data quality.
- Banks will need to invest in training and incentive schemes for individuals involved in LC, in data quality processes (automated or semi-automated reconciliations, sign-offs etc.) and in documentation to ensure that LC is of a sufficiently high quality.
- Risk management teams will need to work together with finance to define exactly how the components of the business indicator are derived from the profit and loss accounts.

Business Model

- The definition of the BIC (as compared to gross income currently used for calculating the more simple Pillar 1 approaches) generates higher capital requirements for some business activities, for example due to the removal of netting rules for profit and loss positions. Banks should analyse their different business lines to ensure they remain sustainable in all aspects (including profitability, capital usage, customer expectations, etc).
- Due to the bucketing of the business indicator, larger banks will face much higher capital charges compared to smaller ones, which might have an influence on strategic decisions (especially non-organic growth through merger and acquisition activities).

Capital

- KPMG experts anticipate a high level of variability in capital impact across banks and across jurisdictions under the new SAOR. There will be contrasting impacts between smaller banks and larger banks, as well as between banks currently adopting BIA or TSO/ASA in Hong Kong.
- Although the new SAOR is not in force until 2023 in Hong Kong, all banks should ensure they are incorporating the future SAOR into their capital planning process as well as in risk adjusted return measures at an early stage.

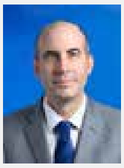
How KPMG can help?

KPMG professionals can assist you with the introduction of the new SAOR by:

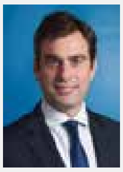
- Advising on the structure of your OpRisk management function and OpRisk models to improve decision-making and the integration of various components of the non-financial risk spectrum;
- Reviewing OpRisk frameworks to incorporate the new requirements while helping to ensure they remain fit for purpose for current regulatory requirements;
- Conducting test calculations of the SAOR and assessing the impact on capital planning, risk-adjusted performance measures, etc.;
- Refining loss-data collection standards and processes to meet the requirements for usage in the ILM;
- Assisting you on system enhancements and generating regulatory and internal reports.

Contact us

Paul McSheaffrey
Partner,
Head of Banking, Hong Kong
KPMG China
T: +852 2978 8236
E: paul.mcsheaffrey@kpmg.com



Tom Jenkins
Partner,
Head of Financial Risk Management
KPMG China
T: +852 2143 8570
E: tom.jenkins@kpmg.com



Michael Monteforte
Partner,
Financial Risk Management
KPMG China
T: +852 2847 5012
E: michael.monteforte@kpmg.com

Edna Wong
Partner,
Financial Risk Management
KPMG China
T: +852 2143 8693
E: edna.wong@kpmg.com

Gemini Yang
Partner,
Financial Risk Management
KPMG China
T: +852 3927 5731
E: gemini.yang@kpmg.com

kpmg.com/cn