Basel III: Credit Risk Standardised Approach
October 2018

On 7th December 2017, the Basel Committee on Banking Supervision (‘BCBS’) published the final standard of its reforms for the calculation of risk weighted assets (‘RWA’) and capital floors. This completed the work that BCBS had been undertaking since 2012 to recalibrate the Basel III framework aimed at making banks more resilient, following the 2007-08 crisis. It also includes a revision of the standardised approach for credit risk (CR-SA).

As credit risk comprises the largest share of most banks’ total RWA, small changes to the risk weighting of credit risk exposures will have a significant impact on a bank’s capital requirements. This is applicable to both banks that apply the standardised approach and those using internal ratings based (“IRB”) approach. The newly introduced capital floor limits the RWA advantage of the IRB approach to 27.5% (floor: 72.5%), when fully phased-in. Thus, all banks need to be aware of the CR-SA changes including their effect on the capital requirements, and adjust their business strategy, processes and pricing accordingly.

Pillar I ratios
Overview

<table>
<thead>
<tr>
<th>Large Exposures</th>
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<tbody>
<tr>
<td>Capital ratio</td>
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<td>Risk Weighted Assets</td>
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<tr>
<td>LCR</td>
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<tr>
<td>Liquidity buffer</td>
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<tr>
<td>Net cash outflows</td>
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<td>NSFR</td>
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<td>Available stable funding</td>
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<td>Required stable funding</td>
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<td>Leverage ratio</td>
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<tr>
<td>Tier 1 Capital</td>
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<td>Total exposure</td>
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Timeline and impact
The revised CR-SA and the new capital floor will be applicable as of 2022* to new as well as existing exposures

The actual RWA impact for a bank is dependent on its exposure distribution and risk profile. As the updated requirements apply to both new and existing exposures, banks are advised to reflect future CR-SA requirements within today’s business decisions.

STC = Standardised approach for credit risk
IRB = Internal ratings based approach

* Timeline based on presumed application dates in Hong Kong, subject to final decision and announcement by the Hong Kong Monetary Authority (“HKMA”)
Key changes and expected impact

The revised CR-SA will impact banks that calculate their capital requirements for credit risk using the STC approach. IRB banks will have to implement the CR-SA to calculate the capital floor which may increase their risk-weighted assets (RWA) significantly.

Background

In the Basel Committee’s view, the current CR-SA has several weaknesses including insufficient risk sensitivity and too much dependence on external ratings. Thus, the finalised Basel III framework contains the revised CR-SA with the following objectives:

CR-SA revision - objectives and measures

- **Increasing the risk sensitivity of the CR-SA requirements** by introducing new exposure classes and additional credit risk assessments
- **Reducing the reliance on external ratings** by establishing additional due diligence requirements
- **Aligning definitions with the IRB** by incorporating a new default definition, and the specialised lending exposure class in the CR-SA
- **Differentiating real estate-secured exposures**, by taking into account the nature of the object, its purpose, as well as establishing additional collateralisation rules
- **Enhancing the comparability of rules among different jurisdiction** was another objective of Basel III, however, the revised CR-SA still contains several implementation options at the local supervisor’s discretion

Overview on key changes

The underlying mechanics of the CR-SA which involve multiplying exposure values with their respective prescribed risk weights to compute the total risk weighted assets as one element of a bank’s capital requirement remain widely unchanged. However, the determination of those components is subject to several adjustments which will lead to both increasing and decreasing RWA among the different exposure classes. Below table highlights some of the key changes:

<table>
<thead>
<tr>
<th>Bank exposures</th>
<th>For unrated banks, a new credit risk assessment approach replaces the fall-back risk weights, which are partially based on sovereign risk weights</th>
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<tbody>
<tr>
<td>Corporate exposures and specialised lending</td>
<td>While risk weights for corporates are adjusted, a new exposure class ‘specialised lending’ is introduced, comprising project, object, and commodity finance</td>
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<td>Real estate exposures (mortgages)</td>
<td>Basel III allows local authorities to select whether such exposures will be risk weighted based on their Loan-to-Value ratio (LTV) or split in secured and unsecured parts with different risk weights. Either option will impose changes to the existing STC rules. In addition, the exposure class is further broken down with increased risk weights e. g. for tenement houses and construction projects.</td>
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<tr>
<td>Treatment of credit cards and commitments</td>
<td>Given the Basel Committee doubts that unconditionally cancellable commitments are safe enough to maintain the current de facto exemption from capital requirements, it introduces a floor for off-balance sheet exposures (10% credit conversion factor). To limit the RWA increase, the risk weight for non-borrowing retail customers with facilities is reduced to 45%.</td>
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<tr>
<td>Further changes</td>
<td>A broader ‘default’ definition replaces the current ‘past due’ criteria and may cause additional data requirements and increasing RWA. Further changes relate to, inter alia, the treatment of equity exposures, retail FX loans, and covered bonds.</td>
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</table>

While the Basel Committee’s aim, increasing risk sensitivity without an undue increase of the global average RWA, may have been accomplished, the revised CR-SA’s impact on individual banks and among jurisdictions will vary significantly.

Illustrative impact estimation, based on BCBS 424

**Exposures with a likely RWA increase**
- Pre-operational project finance
- Acquisition, construction, and development of property
- Credit card and revolving loans / facilities
- Exposures to ‘weak’ unrated banks

**Exposures with a likely RWA decrease**
- Mortgages with very low LTV
- Unrated project finance that meets certain ‘high quality’ criteria
- At jurisdictions’ discretion: commercial real estate, specific defaulted exposures, and certain equities
Achieving CR-SA readiness

Given the importance of credit risk, slight changes to the applicable risk weights and a few additional data requirements can have a material impact on the capital ratio and a considerable implementation cost. Banks are advised to perform an impact analysis at an early stage to understand the effects and interdependencies of a future revised CR-SA application.

Strategic considerations and implementation aspects

A holistic preparation for the revised CR-SA addresses at least the quantitative, business and data/IT impact. In addition, strategic considerations (including the identification of opportunities and impact-controlling actions) and capital optimisation measures will help turn a regulatory necessity into a controllable challenge:

**Strategy**
- Be aware of the CR-SA impact on your bank
- Reduce negative impact:
  - Question and revise your product strategy
  - Question some of your equity holdings
  - Review business relations with unrated banks
  - Optimise your bank’s risk assessment result, if unrated, to limit the indirect CR-SA impact on your funding cost
- Identify opportunities, e.g.:
  - Can you turn capital strength into a competitive advantage in RWA-driving business areas?

**Capital optimisation**
- Participate in (upcoming) consultations on the local CR-SA implementation
- Consider partial IRB implementation allowed for in Basel III (Hong Kong adoption currently unclear)
- Identify the potential for an optimisation of your current STC implementation (e.g. collateral approach)

**Business**
- Incorporate new requirements and strategic decisions in your policies and processes
- Reflect future capital cost in your pricing of long-term instruments
- Implement changes to business processes, e.g. due diligence for externally rated exposures, additional data needs
- Gather additional data, e.g. real estate financing, identification of ‘transactor’ customers,
- Question your approaches and principles for collateralisation

**Data and IT**
- Assess required changes to existing systems
- Implement new data requirements in terms of data fields, flows, interfaces, and governance
- Prepare for future changes to the reporting and disclosure templates

The first step: Understanding the impact

The PwC Credit Risk Calculator assists banks with assessing the quantitative impact of the revised CR-SA. The tool calculates the impact on the bank’s RWA based on its existing risk or reporting data. In addition, the tool allows for the simulation of scenarios and, thus, supports strategic and business decisions and makes potential data gaps transparent.

1. **Provision of data**
   Provide us with your current risk or reporting data in a predefined format

2. **Determination of assumptions**
   Together, we will determine assumptions and develop proxies for data gaps, options at local discretion and existing modifications of Basel II

3. **Calculation**
   The PwC Credit Risk Calculator processes your data and calculates a projection of your future capital requirements
   - Stable and fast processing of your data
   - Simulation of different scenarios possible

4. **Results**
   ✓ Impact of the revised CR-SA on your RWA
   ✓ Results for different scenarios and assumptions
   ✓ Identification gaps in your data base
   ✓ Calculation of capital floor effects for IRB banks
How PwC can support you

To help you assess and understand the impacts of the recently-announced reforms, we have established a team of Basel III experts across our global network. Our experts have a wealth of experience and expertise around the intricate workings of Basel III and are dedicated to assisting banks with assessing and meeting the new Basel III requirements.

If you like to discuss the CR-SA or any other Basel III component in greater depth, please reach out to one of the following Basel III team members in Hong Kong.

**Basel III team**

**Emily Lam**  
Partner  
Financial Services Risk and Regulation  
T: +852 2289 1247  
E: emily.lam@hk.pwc.com

**Brian Yiu**  
Partner  
Financial Services Risk and Regulation  
T: +852 2289 1934  
E: brian.ky.yiu@hk.pwc.com

**Karen Wong**  
Financial Services Risk and Regulation  
T: +852 2289 2571  
E: karen.tw.wong@hk.pwc.com

**Brian Yam**  
Financial Services Risk and Regulation  
T: +852 2289 1689  
E: brian.yt.yam@hk.pwc.com

**Sebastian L. Sohn**  
Financial Services Risk and Regulation  
T: +852 2289 3127  
E: sebastian.sohn@hk.pwc.com

**PwC Materials**

- Dedicated PwC Basel III Webpage: [https://www.pwc.com/baseliv](https://www.pwc.com/baseliv)
- Dedicated PwC Basel III channel – The channel is a new medium to give you a periodical overview on current topics around Basel III reforms. It comprises a series of online lectures supported by slides:  
  [https://www.youtube.com/channel/UCosEew32oLF9ApuGRO48bBg](https://www.youtube.com/channel/UCosEew32oLF9ApuGRO48bBg)
- Register for the Basel III channel: [https://www.pwc.com/gx/en/services/advisory/basel-iv/register-basel-iv.html](https://www.pwc.com/gx/en/services/advisory/basel-iv/register-basel-iv.html)

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