





Risk and Regulatory Outlook 2021

Key developments in Southeast Asia - Basel III finalisation



Basel III Finalisation



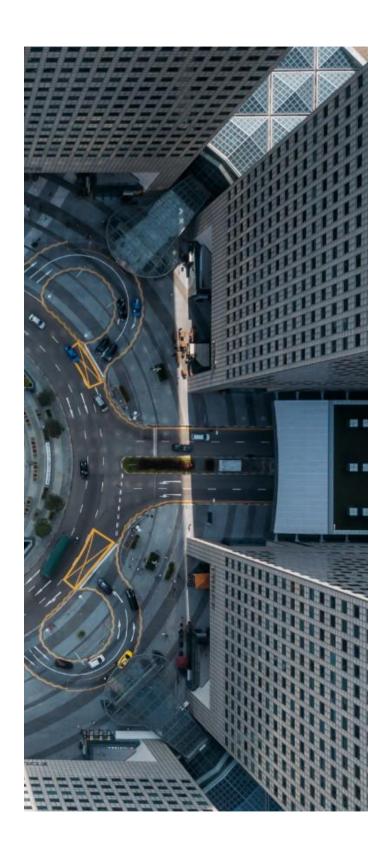
Overview

In 2017, the BCBS published the finalised Basel III framework (aka Basel IV). As a key element of BCBS' post-global financial crisis response, Basel III aims to enhance financial stability by (1) reducing reliance on internal models, (2) increasing the risk sensitivity of standardised approaches, and (3) improving comparability and transparency across banks globally.

With the finalisation of Basel III, the BCBS aims to:

- increase the robustness and risk sensitivity of the standardised approaches for credit risk and operational risk, to improve the comparability of capital ratios across banks;
- limit the use of internally modelled approaches;
- complement the risk-weighted capital ratio with a finalised leverage ratio and a robust capital floor;
- impose a higher leverage ratio for G-SIBs to reduce overall systemic risks on global financial markets in case of a financial crisis; and
- enhance disclosures on reserves and other financial information to improve transparency and comparability.

These Basel International Committee (BIS) standards are subjected to a national adoption by the member countries within the internationally agreed timeline (ie. effective date 1 Jan 2023). By then, countries will need to decide on national implementation options and possible deviations from the global framework. Non-member countries have not committed to the implementation of the Basel III standards. However, these countries tend to follow Basel standards in principle, often with significant local adjustments.



Regional regulatory developments

In SEA, adoption of the finalised Basel III framework across the region has been splintered, with some markets still amid implementation of the first part of Basel III or even the adoption of Basel II. Singapore and Indonesia are members of the Basel Committee while Malaysia holds an "observer" status.

MAS has been the frontrunner in adopting new Basel standards. In May 2019, MAS released a consultation paper¹ to seek feedback on Basel III requirements of national discretion. Taking into account the feedback received, MAS has issued a subsequent consultation paper² in December 2020. The consultation, which seeks feedback on the operational risk capital and leverage ratio requirements for Singapore-incorporated banks, is open for comment until 21 January 2021. Other regulators are expected to issue consultative papers or draft regulations in 2021 and 2022.

Some banks in Singapore have already started to assess the operational and capital impact, and its related strategic implications, and prepare their systems and processes for the application of the local Basel III requirements. Banks in other SEA countries are expected to follow suit once their local regulators start their consultative process as well.

The Basel III finalisation essentially affects all elements of capital requirements calculation, and in particular, credit risk, operational risk and market risk. These are the most material risk types for the majority of banks.

We look at how changes to these standards are likely to have the highest impact on banks in the region, focusing on credit risk, operational risk, the output floor and the leverage ratio.



¹ Monetary Authority of Singapore, "Consultation Paper: Proposed Implementation of the Final Basel III Reforms in Singapore," May 07, 2019.

² Monetary Authority of Singapore, "Response to Feedback Received on the Proposed Implementation of the Final Basel III Reforms in Singapore – Operational Risk Capital and Leverage Ratio Requirements," December 17, 2020.

Credit risk

Standardised approach (CR-SA)

Exposures to banks

For exposures to externally rated banks, the external rating is used for risk weight determination. Under the new framework, this process is subject to additional internal due diligence. Hence, a bank needs to assign a higher risk weight if the internal due diligence suggests a higher risk than that implied in the external rating.

Unrated banks will be subject to a standardised credit risk assessment approach (SCRA) that requires banks to determine the risk weight based on regulatory and financial indicators. This replaces the previous fixed and government rating-derived fallback risk weights for unrated banks.

Exposures to corporates and small and medium-sized entities (SMEs)

The finalised Basel III framework increases the risk weight for exposures with an external rating between BBB+ and BBB- from 75% to 100%. Due diligence upon origination and on a periodic basis (no less than annually) is required.

Where the unrated corporate is an SME, a risk weight of 85% will be assigned. This will apply to SME exposures that exceed the exposure cap of SGD \$2 million and that do not qualify for the regulatory retail asset class.

In Singapore, the large corporate threshold will be set at SGD\$750 million and the corporate SME threshold under the SA (CR) is to be set at SGD\$100 million in annual sales.

Exposures to residential and commercial real estate (RRE and CRE)

The Basel Committee allows national regulators to choose from a loan-splitting approach and a Loan-to-Value (LTV) "whole loan" approach. While the former is widespread in Europe, the MAS and other Asian regulators have been using the latter and, consequently, the MAS intends to maintain this stance. Risk weights may drop for mortgages with low LTVs (20% instead of 35%) but rise to 70% and more for high-LTV exposures.

To be noted in particular is the Income-Producing Real Estate Exposures (IPRE), defined as loans with the repayment being materially dependent on cash flows generated by the financed property. Those exposures, no matter related to residential or commercial property, will receive a higher risk weight than exposures secured by the owner-occupied property.

As the required detailed information might not be readily available in banks' risk and reporting systems, operational implementation efforts are expected.

Acquisition, development and construction (ADC) exposures

The Basel III finalisation requires ADC exposures to be risk-weighted at 150%. This excludes the ADC exposures to RRE which meet certain operational requirements. where the presale or pre-lease contracts amount to a significant portion of total contracts or substantial equity at risk.

The MAS has proposed for such exposures to be subject to a risk weight of 100% where the LTV is less than or equal to 80%. In addition, the MAS intends to apply RRE risk weights for exposures secured by properties that are still under construction, provided that they meet the MAS' criteria.

Specialised lending exposures

Another significant change to the CR-SA is the introduction of the specialised lending exposure class. Banks need to identify project, object and commodities finance which will receive either an external-rating-based or a fixed risk weight of 100%.

For pre-operational project finance, a 130% risk weight is applicable whereas exposures to projects that fulfil certain "high-quality criteria" will be assigned 80% preferential risk weight. As this exposure class is newly introduced in the CR-SA, banks will likely face implementation challenges when it comes to the identification of such exposures.



Off-balance sheet exposures/ commitments

With the Basel III Finalisation, a 10% credit conversion factor (CCF) is introduced for unconditionally cancellable commitments (UCC). To limit the increase in RWA credit card issuing banks, the risk weight for retail exposures that arise from transactors (e.g. credit cardholders that do not use the credit feature of their cards) has been reduced to 45%.

Singapore, however, already has a minimum CCF of 10% in place for such commitments. Considering this, the question arises whether a beneficiary treatment of transactors will be introduced, given it has not been mentioned in the consultation paper.

Equity risk weights

Under the finalised Basel III requirements, the risk weights for equity will be changed to 250% for equity exposures and 400% for speculative unlisted equity. While banks' holdings in these classes tend to be relatively small, this significant increase will massively drive the associated capital cost.

In the consultative paper, the MAS proposed to adopt the phase-in arrangement for new equity risk weights as set out by the BIS which prescribes an annual incremental increase of risk weights from 100% to 250% and 400% respectively from 2023 to 2027.

Internal ratings based (IRB) Approach

Under the global finalised Basel III, banks can apply to adopt the IRB approach for certain asset classes subject to a bank-wide threshold for the IRB-eligible portion of their credit portfolio. However, it is unknown if this will be adopted in the region.

For existing IRB users, the changes are as follows:

Removal of the A-IRB for certain asset classes

Banks will not be allowed anymore to use the A-IRB for i) large and mid-sized corporates and ii) banks and other financial institutions (FIs). In addition, both IRB approaches will be removed for equities for which the CR-SA risk weights will be assigned going forward.

Introduction of minimum parameter floors

Parameter floors have been included (for probabilities of default (PD) and loss-given-default (LGD)) to define minimum model parameters with a certain level of conservatism for corporates, retail mortgages, QRRE transactors and revolvers, and other retail.





Operational risk

The finalised Basel III framework replaces the existing three approaches to calculate capital requirements for operational risk (in Singapore, the existing MAS Notice 637 contains an additional "alternative standardised approach"), removes the option of using an internal model-based approach, and introduces a binding revised standardised approach for all banks.

The standardised approach for operational risk RWA calculation is built on (i) the business indicator (BI) component which is the product of BI, the financial statement-based business indicator, and α ("alpha"), a marginal coefficient with prescribed lookup values depending on the BI cluster as set out by the regulator, and (ii) the Internal Loss Multiplier (ILM) that adjusts the capital requirement based on banks observed historical losses from operational risk.

In its initial consultation in May 2019, MAS announced its intention not to adopt the internal loss multiplier requirement (i.e. to have all banks set their ILM multiplier to one). It also proposed to require all banks with a business indicator above SGD\$1.5 billion to follow the international standards for loss data collection (LDC) in disclosing their operational losses on an annual basis as a component of their Pillar 3 reports.

However, given the industry concerns raised on MAS' approach being insufficiently risk-sensitive and potentially penalising of banks that historically had low operational losses, MAS proposed a more nuanced approach in December 2020:

- Banks with BI greater than S\$1.5 billion compulsory to incorporate losses into the calculation of the operational risk capital requirement and meet minimum loss data standards. Failure to meet the minimum loss data standards would result in the banks' ILM being set to one, or greater than one, as specified by MAS. Disclosure requirements remain unchanged
- Banks with BI less than S\$1.5 billion may elect to incorporate losses into the calculation of the operational risk capital requirement, provided that MAS' approval is obtained, and the minimum loss data standards and disclosure requirements are met. Otherwise, ILM will be set to one and minimum loss data standards and disclosure requirements no longer apply

The LDC data requirements are more stringent than those currently required for the basic indicator and standardised approaches. The requirements set out detailed rules for the collection, storage and classification of operational loss data. This includes capturing losses from all subsystems and locations in a detailed manner with thresholds as low as €20,000 (~SGD\$32,000).

Singapore-based banks that exceed the above-mentioned BI threshold will likely have to enhance their systems. databases to capture these losses in the required granularity and depth to meet the disclosure requirements and other potential supervisory expectations.

Output floor

To reduce the variability of capital requirements and achieve an international level playing field in the adoption of minimum capital requirements, the finalised Basel III framework introduced a revised capital floor. In other words, this floor ensures that the (consolidated) bank-level RWAs amount to at least 72.5% of the RWA calculated by using the standardised approaches. To smoothen the implementation of the output floor, BCBS allowed a phased-in approach, starting with 50% in 2023 and increasing gradually to 72.5% in 2028 which the MAS has adopted.

While the output floor will drive banks' capital requirements in jurisdictions with widespread uses of internal models and comparatively low resulting RWA density, such as in some EU countries and Japan, the effect in Singapore may be less massive for locally incorporated banks. This is because the existing Notice 637 is already requiring banks using internal models to adhere to capital floors concerning the local Basel I adoption or the local Basel II standardised approaches.

However, the new capital floor will require all banks, including that rely on internal models, to implement the revised standardised approaches. This will likely cause additional data requirements and the need to enhance existing calculation engines and reporting systems, even if the capital impact is expected to be on the lower side for a majority of banks in the region.

Leverage ratio

In line with the development of risk-weighted capital requirements, the Basel III finalisation contains the revision of the Leverage Ratio for the calculation of the counterparty credit risk exposure from derivative transactions. In Singapore, the MAS will adopt this approach with effective date 1 January 2022 while it intends to allow banks to use the modified SA-CCR for the leverage ratio earlier (in line with the application of the SA-CCR in the risk-weight capital requirements regime).



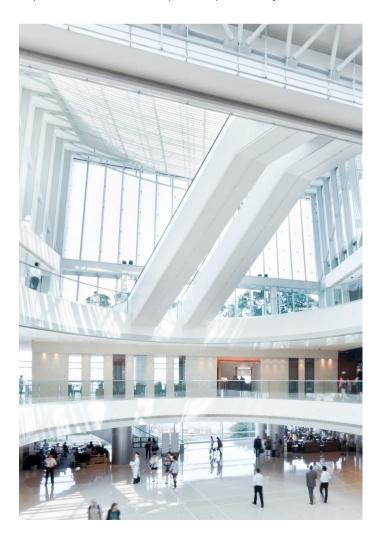
Outlook for 2021 and recommendations



Outlook #1: Banks will need to adjust fast with changing capital requirements

Depending on the approaches used for calculating capital requirements, the business model and the portfolio of a bank, the total capital requirements of a bank may rise or fall. This outcome is also contingent on the individual profile of the bank's portfolios, and the countries in which they operate.

Recommendation: A high-level impact assessment should be conducted to understand the effects of the local adoption of Basel III requirements on their capital. Rising capital requirements call for a strategic approach to disposing of the risky assets or raising capital. The latter option may be a challenge in some countries where the appetite of capital markets, existing ownership or investment restrictions may prevent banks from raising sufficient capital from external investors. On the other hand, cases of declining capital requirements may raise questions around the optimal utilisation of a bank's capital and the related impact on profitability.





Outlook #2: Banks need to re-evaluate attractiveness of asset classes, against changing capital cost, revised risks weightage and operational requirements

In Basel III, the effects of the changes in capital requirements for different portfolios and exposure types vary significantly. For instance, there is an increase in operational efforts and capital requirements for large corporate exposures or income-producing real estate exposures. On the other hand, corporate SME exposures and residential mortgages for owner-occupied real estate may require less capital going forward. Therefore, banks may want to re-evaluate the attractiveness of each asset class and portfolio individually, taking into account the revised risk weightings and operational requirements.

Recommendation: Capital should be strategically allocated to the asset classes with the highest return, considering the finalised Basel III. Subsequently, banks should reduce exposures to low-return assets and ensure that every asset class and portfolio can yield its allocated capital cost as a minimum. This does not necessarily mean that banks need to get rid of exposures with higher risk weights. Depending on risk appetite, higher capital requirements could be compensated through a corresponding pricing strategy.

However, this requires banks to calculate the current and future capital cost at the time of incurring an exposure, given the rather long terms and often fixed margins of such exposure. Calculator today's margins while taking effects from the Basel III changes into account can therefore be a competitive advantage if it allows to underbid competitors or realise higher returns on capital than other banks.

Outlook for 2021 and recommendations



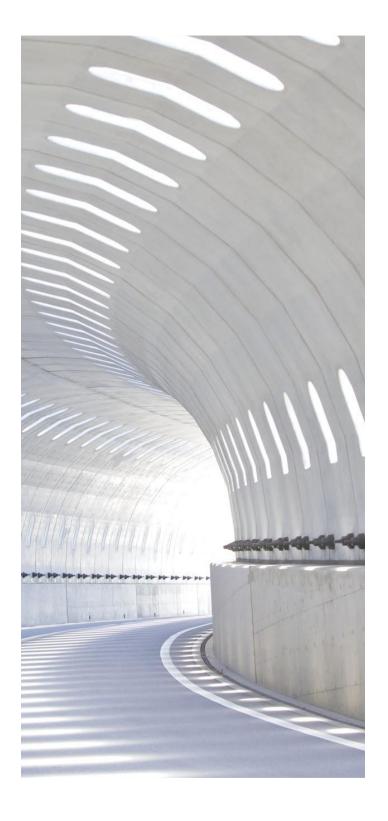
Outlook #3: Banks to enhance optimisation of capital requirements

In SEA, the IRB approach is more common in some countries and less in others. Singapore's three local banking groups are using the IRB approach whereas Indonesia and other countries are dominated by banks using the standardised approach. Given the revised output floor, all local banks, including those using the IRB approach² would have to calculate the CR-SA and ensure the readiness of their data and systems for this requirement.

Recommendation: Banks may want to stay on top of requirements by enhancing or re-developing their IRB models. The changes resulting from input floors and reduction in IRB scope warrant the need to recalibrate, enhance or re-develop (if applicable) the impacted IRB models. Therefore, banks should assign resources to drive model-related changes in advance, such as updating relevant model policies, enhancing internal control measures and conducting validation process.

Also, banks should consider devising an RWA optimisation strategy by assessing portfolio eligibility to the IRB approach. Overall, the revisions to the IRB approach will likely lead to increases in capital requirements for exposures no longer eligible for IRB approach. Banks should carefully assess the impacts with regards to Basel III reform changes as they may imply changes on the business model (including pricing and risk management practices).

Lastly, banks should develop or enhance a robust collateral framework and credit risk mitigation measures. Banks need to re-examine its collateral framework and credit risk mitigation measures. Basel III reform warrants a prudent review of its collateral and guarantee policies, product adjustments to achieve optimal credit risk mitigation effects and capital.



² Basel Committee on Banking Supervision, "Regulatory Consistency Assessment Programme (RCAP) Assessment of Basel III regulations – Singapore," March, 2013.

Outlook for 2021 and recommendations



Outlook #4: Regional disparity in finalised Basel III framework adoption to remain in the near term

Regional banks are currently in a quandary in terms of investing in systems, given the fragmented implementation of finalised Basel III across SEA. Most banks operate in multiple jurisdictions, the timeline and extent of Basel III adoptions will likely vary. Singapore is one of the first adopters in the region while Indonesia as a BCBS member and Malaysia as an observer in the BCBS are likely to implement a local Basel III framework as well, at the same time or shortly after Singapore. Other countries in Asia may follow later and with a different scope of requirements.

Recommendation: For banks, this poses an issue when planning implementation projects across the region. Banks could invest in a regional system upgrade and set up a regional implementation program based on an assumed timeline for the different jurisdictions. This centralises certain tasks with corresponding efficiency gains and provides the opportunity to invest in an efficient and sustainable IT solution. Alternatively, they can extend existing solutions or use workarounds for each country while waiting for Basel III finalisation to ripple across the region before making a full technological investment.

Each option has pros and cons. The former would incur higher financial costs but reap savings in terms of human capital and risk mitigation. The latter is more cost-efficient in the short-term but the significant degree of manual intervention exposes the bank to operational risks, which may lead to reputational damage. Banks need to consider and perform a cost-benefit analysis to determine the optimal strategic solution for their situations.





Outlook #5: Increased adoption of data and technology

Full compliance with the Basel III finalised requirements needs a solid foundation in the form of data availability, quality and regulatory reporting solutions. So for countries that are still in the process of adopting Basel II or the earlier form of Basel III, banks may want to start considering early adoption of the new data requirements and consider the right technology response to the Basel III finalisation to minimise transition costs and efforts when they finally adopt the final Basel III framework.

Recommendation: Banks using self-developed, manual or partial solutions for their regulatory calculations and reporting may consider switching to off-the-shelf solutions, e.g. WKFS OneSumX, AxiomSL, Moody's RAy and others. Thus, they can turn the cost required for Basel III compliance into an investment case for more efficient regulatory management and reporting. The same is true for a regional centralisation of such expertise and solutions.

Where an end-to-end upgrade of the regulatory IT architecture is not feasible, banks could consider improving operational efficiency through Robotics Process Automation (RPA). Besides utilising RPA to streamline the operational processes and boost efficiency, While the investments might increase cost in the short term, it is likely to yield long-term rewards.

While the implementation of the finalised Basel III framework will not be as massive as that of Basel II, changes can be significant and require banks' responses to strategic as well as operational challenges. Banks that are forward-looking and willing to start their preparations now are likely to become ahead of their peers in the region and may gain competitive advantage by establishing the foundation for their Basel III Finalisation strategy ahead of its peers.

A good starting point for any bank is to perform a qualitative and quantitative impact assessment. This will help banks to understand the strategic and operational effects of Basel III and to develop a roadmap to Basel III readiness.

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