KPMG

# Overview of Local Implementation of Basel IV

January 2021

## 1. Overview of Basel IV

The Basel Committee published in December 2017 a revised set of minimum standards for the capital treatment of credit risk, operational risk and credit valuation adjustment risk, and for a new output floor to limit the extent to which banks will be able to use internal models for credit and market risk to drive down capital requirements. The revised capital standards were due to be implemented in January 2022, and the output floor to be phased in from 2022 to 2027. However, due to COVID-19 these timelines have been deferred by 1 year, both locally by the HKMA and internationally by other major regulators.

KPMG has been following the evolvement of Basel IV closely over the past 5 years. We have been involved in a lot of discussions with the industry and the regulators that drove the finalization of the rules. Our local and international teams worked hand-in-hand in developing our Basel IV solutions and tools that we perceive will help banks implement the new rules cost efficiently and follow market best practices.

## 2. Key implications for banks

Some banks may face significantly higher minimum capital requirements as a result of the new Basel Committee standards, although the impacts will be cushioned by the long transition period, in particular for the output floor.

### Credit Risk

For banks using the internal ratings based (IRB) approach to credit risk the output floor can have a significant impact. Some banks using the IRB approach will also be affected by the constraints on the use of internal models to measure credit risk – these constraints will force banks to apply higher risk weights to exposures where no internal model approach can be used. Banks moving from the current to the revised standardised approach for credit risk will face higher capital requirements for some types of lending, including buy-to-let and similar exposures to property where repayment relies on income from the property.

### Market Risk

Fundamental Review of the Trading Book ("FRTB") redefines the boundary between the banking book and the trading book. The new standardized approach and internal model approach are significant overhaul to existing practices. Capital requirements under either approach is expected to go up.

### Operational Risk

The new standardised approach for operational risk generates a much higher capital charge for banks that previously used a more advanced approach, or that have high recent misconduct costs. The requirement on using 10 years of loss data may introduce a significant challenge to some banks.

### Counterparty Credit Risk

Capital requirements for counterparty credit risk will increase for banks that have to switch from using an internal model method for credit risk mitigation to the more penal standardised approach to counterparty credit risk. The new standardized approach for credit valuation adjustment ("SA-CVA") will require a lot of implementation efforts in relation to data, modelling of sensitivities and model governance.

# 3. Data and systems

All banks will need to change their systems, or to build new systems to ensure that they are able to collect, analyse and report the necessary data on borrowers and other counterparties. For credit and market risk, banks using internal models will also have to calculate their risk weighted exposures using the new standardised approaches in order to apply the output floor. And within the new standardised approach for credit risk banks will need to use due diligence to check on the accuracy of external credit ratings, and to assess whether borrowers are materially dependent on the cash flows generated by a property securing an exposure.

In general, the implementation of the Basel 4 standards will change banks' risk measurement and risk models to a much greater extent, so banks with legacy IT, data and reporting systems will face significant cost pressure. The difficulties faced by many large banks in meeting all of the Basel Committee Principles on Risk Data Aggregation and Reporting suggest that the systems and data requirements of the revised standards will require considerable investment and senior management attention.

# 4. Banks' strategic options

Banks' strategic options to address Basel 4 are likely to focus primarily on adjusting their product and client portfolios, and on achieving operational efficiencies. Some banks will also need to strengthen their capital ratios.

### Product mix

Banks may need to adjust their product mix (and the specific characteristics of some products such as real estate lending) in response to changes in risk weightings. This could take the form of moving out of some products, leaving banks less diversified and subject to greater volatility in earnings and profitability.

This may in turn increase competition in higher quality exposures, putting downward pressure on profitability. It may also create opportunities for some banks in product areas where higher prices compensate sufficiently for higher risk weightings.

### Lower cost to income ratios

Basel 4 and other regulatory requirements heighten the importance of delivering cost efficiencies. There is scope for banks to drive down cost to income ratios through fintech applications and through consolidation in the banking sector. But this will be complex and time consuming, and banks also face some pressures (gearing up to take advantage of fintech opportunities, and regulatory requirements) that will increase costs, at least in the short to medium term.

### Increase CET1 capital

This will be the simplest option for some banks, through either retained earnings or issuing additional capital. But this will increase the cost of funding and put further downward pressure on profitability. So this may need to be combined with other options.

### Reduce risk weighted assets

This can be achieved by shrinking the balance sheet (deleveraging), or by shifting from higher weighted to lower weighted risk exposures. But this may result in banks losing market share, business volumes, earnings and profitability. For some banks, there is also scope to move from standardised approaches to credit and market risk to internal model approaches.

# How KPMG can help?

In KPMG, we have established a team of Basel IV specialists to support banks in this important journey. We have developed solutions and tools to assist you on any of the following actions:

- Undertaking a gap analysis exercise against the new requirements, and developing roadmaps for implementation;
- Conducting test calculations of the revised standardised and internal model approaches and assessing the impact on capital planning and risk-adjusted performance measures;
- Evaluating and addressing the business model implications from profitability changes at product and customer level;
- Advising on focused transactions to improve capital allocation or increasing the use of originate-to-distribute products;
- Developing an appropriate model risk management framework and enhancing the current model development and validation processes;
- Helping to prioritise efforts on those aspects of the requirements that are good practice and represent 'no regrets' choices, such as data cleansing (quality) and alignment (Front Office and Risk); Front Office data granularity and availability of data; enhancing model governance; understanding modelling differences across Front Office, Risk and Finance; and assessing regulatory and other programme overlaps and potential efficiencies.

| Credit Risk | Market Risk | Operational Risk | Counterparty Credit Risk |
|---|---|---|---|
| • Advise you on data collection and operational requirements for the CR-SA, for example documentation requirements for secured loans, and on the design of due diligence procedures;<br>• Assessing the implications of the interplay between the restrictions on the use of the IRB approach, the output floor and the revised Standardised Approach, and to assess corresponding business decisions. This can also be extended to cover the combined impact across risk types (credit, market and operational). | • KPMG has been assisting local banks on FRTB implementation; our hands-on experiences can help you quickly understand the new requirements and implementation pain points.<br>• KPMG professionals have developed FRTB implementation and validation tools to help banks adopt the new rules. These tools are well validated internally and externally and can offer quick wins. | • KPMG can assist you on reviewing and enhancing your operational risk frameworks to incorporate the new requirements while helping to ensure they remain fit for purpose for current regulatory requirements;<br>• KPMG operational specialists can assist you on refining loss-data collection standards and processes to meet the requirements for usage in the internal loss multiplier. | • KPMG can assist you on SA-CCR implementation with our hands-on experiences and well tested SA-CCR tools.<br>• We will use our CVA tools to help you quickly understand the capital impacts under the new framework.<br>• Our CVA experts can help you analysis the pros and cons of adopting the BA-CVA or the SA-CVA approaches; and provide comprehensive roadmap for implementations. |

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