The Basel Committee on Banking Supervision (BCBS) issued new standards on IRRBB in April 2016. In response to the new standards, the HKMA published a consultation paper regarding the proposal to update the current SPM module IR-1 “Interest Rate Risk Management” and the return of “MA(BS)12 — Interest Rate Risk Exposure” in June 2017. The new standards on IRRBB will become effective by 1 January 2019, with three key areas of changes set out below:

**Pressing challenges faced by the industry when implementing the new IRRBB standards**

**Data, Systems, Processes & Controls**
- Reassessing the suite of products is imperative to determine the appropriate behavioural and modelling assumptions
- Additional data requirement with high granularity is essential for internal deals and substitution
- Consolidation of data from local/overseas subsidiaries can be challenging as the management information system of those entities may be less sophisticated
- Fair values models of automatic options (both standalone and embedded options) should be developed using a full-revaluation approach

**Risk Management**
- Stricter threshold for identifying outlier banks, the management information system for IRRBB should be accurate, informative and timely to prevent the AIs from being classified as outliers
- Credit spread risk in the banking book (CSRBB) guidance provided to the AIs is limited regarding its calculation and monitoring approach
- Firm-wide stress testing and ICAAP framework need to be revised to ensure they are aligned with the standardised framework and all factors required in relevant SPMs have been considered

**Greater guidance on NII and EVE computation:**
- 6 standardised shock scenarios and respective behavioural changes for ΔEVE
- 2 parallel shift scenarios for ΔNII
- More guidance on internal stress-testing scenarios (e.g. interaction with other risk types, basis relationships)
- Reporting on consolidated, combined and solo basis

**Heavier modelling demands on cash flow projection:**
- Consideration of behavioural factors during the cash flow slotting process, e.g. behavioural maturity of NMDs
- Consideration of automatic optionality to compute the fair value, e.g. Prime caps, interest rate floors, callable options, etc.

**New requirement on Credit Spread Risk in the Banking Book (“CSRBB”):**
- Changes to market liquidity spreads and market credit spreads are combined within the definition of CSRBB
- CSRBB is driven by changes in credit quality
- Bank should monitor and assess their CSRBB
Key components in the new IRRBB standards

**Classification of positions**
Banking book positions must be classified by their amenability to cash flow standardisation.

- **Amenable**
  - Fix/Float/Swaps

- **Not Amenable**
  - Non-maturity deposits/Behavioral Options

- **Less Amenable**
  - Automatic Options

**Behavioural options**
Contractual cash flows must be adjusted for customer behaviours. Banks need to implement models to project the following four types of behaviour.

- Retail positions only
  - Deposit early withdrawal
  - Loan prepayment
  - Non-maturity deposits
  - Off-balance sheet commitments

**Automatic options**
Interest Rate Options where the client is expected to exercise whenever there is a gain need to be fair valued for risk measurement purpose. Banks need to have relevant valuation models in place.

- Caps and floors
- Callable options
- Behavioral options for wholesale customers

**Cash flow projection / Reporting**
While the reported items are similar to previous standards, there are major updates in several areas of the MA(BS)12 Return.

- Reporting under consolidated basis
- Consideration of coupon cash flows
- Incorporation of behaviors and automatic options
- 6 standardised shock scenarios

**Integration with ICAAP**
As IRRBB is a Pillar 2 risk, banks need to update their ICAAP framework accordingly based on new IRRBB standards, particularly in the following areas.

- ICAAP Framework
  - Risk appetite
  - Risk assessment
  - Capital stress testing

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