The use test for internal ratings-based approaches under Basel II

by the Banking Policy Department

Under the Basel II framework, authorized institutions (AIs) intending to adopt the Internal Ratings-based (IRB) Approaches to the calculation of the regulatory capital charge for credit risk are required to meet the use test requirement. The use test ensures that rating systems and estimates are not designed and implemented exclusively for the purpose of qualifying for the IRB Approaches or used only to provide IRB inputs.

In the Basel II consultative document, "Minimum Requirements for Internal Rating Systems under the IRB Approach" (Min IRS) issued in August 2004, the HKMA proposed that internal ratings systems should be implemented for a minimum of two years before being used for capital adequacy purposes. In addition, in the Supervisory Policy Manual module, "Validating Risk Rating Systems under the IRB Approaches" (CA-G-4) issued in February 2006, the HKMA outlined its expectations concerning the areas in which these systems should be used internally by AIs. This memo explains more about the HKMA's use test requirement and the evidence of use it expects to see from AIs.

Q.1 What were the proposals in Min IRS on the use test requirement?

A.1 Min IRS proposes that an AI should have a credible track record in the use of information generated by its internal rating systems (Paragraph 7.2.1). The AI should also demonstrate that it has been using internal rating systems that are broadly in line with the minimum requirements for at least two years prior to qualification as an IRB AI. In particular, internal ratings and default and loss estimates should play an essential role in the credit approval, risk management, internal capital allocations, and corporate governance functions of the AI.

However, the use test should be applied to the internal rating system as a whole rather than to individual models within the system. Thus, AIs may not necessarily be using exactly the same

estimates for both IRB and all internal purposes. For example, pricing models are likely to use probability of default (PD) and loss given default (LGD) relevant to the life of the asset. AIs should document and provide justifications for such differences.

Q.2 How will the HKMA apply the two-year use test during the 2007-2009 transition period?

A.2 The HKMA has compared its use test requirement against those of several other leading jurisdictions. It focused on those with home-host co-operation with the HKMA in relation to foreign banking groups which have AI subsidiaries planning to adopt the IRB approaches between 2007 and 2009. A number of these jurisdictions intend to reduce the use test requirement to one year for Foundation IRB (FIRB) applicant banks and two

years for Advanced IRB (AIRB) applicant banks. This could create a situation where the parent bank would be subject to a shorter use test requirement than its Hong Kong subsidiary, resulting in an undue burden on, and a delay to, IRB implementation in Hong Kong by foreign banking groups. In this situation, the HKMA might need to exercise its discretion to reduce the two-year requirement case by case as provided under Paragraph 7.2.2 of Min IRS. However, if it did so, the HKMA would also need to have regard to the possible impact on local IRB applicants.

Therefore, to maintain a level playing field among the relevant AIs, the HKMA has decided to reduce the time for which internal rating systems should have been in use to one year for all AIs intending to adopt FIRB during the three-year transition period 2007-2009. AIs proposing to adopt FIRB after the transition period and AIs planning to implement AIRB will remain subject to the two-year requirement. The proposed change will bring Hong Kong into line with the requirements of other leading jurisdictions with which the HKMA has home-host co-operation.

Q.3 What are the areas of use described in CA-G-4?

A.3 As listed in Paragraph 5.4.2 of CA-G-4, the areas of use include:

- credit approval

- pricing

- individual and portfolio limit setting

- credit monitoring (for example, higher rating review frequency for riskier obligors)

- analysis and reporting of credit risk information, including that for the Board and senior management oversight

- determining provisioning

- modelling and management of economic capital

- assessment of total capital requirements for credit risks under the AIs' Capital Adequacy Assessment Process (CAAP)

- assessment of risk appetite

- formulating business strategies (for example, acquisition strategy of new exposures and collection strategy of problem loans)

- setting of, and assessment against, profitability and performance targets

- determining performance-related remuneration (for example, for staff responsible for rating assignment and approval)

- other aspects related to AIs' risk management (for example, information technology systems, skills and resources, and organisational structure).

Q.4 Will AIs be required to use internal rating systems in all the areas described in CA-G-4?

A.4 Based on further discussions with individual AIs and supervisors of other jurisdictions, the HKMA recognises that during the early years of IRB adoption it will be difficult, in practice, for AIs to use internal ratings and default and loss estimates in all the areas of use set out in Paragraph 5.4.2 of CA-G-4. While this remains a valid long-term goal, in the shorter term there is a practical need for AIs to concentrate their resources on the proper development, implementation, testing and validation of their internal rating systems. It will also take time for AIs' management and business and risk

management units to become accustomed to the new credit risk management concepts. Therefore, in assessing compliance with the use test, the HKMA intends to allow AIs to extend the use of their IRB systems gradually and in phases and to take into account the overall usage of the internal ratings and default and loss estimates for internal purposes by AIs. This provision is closely aligned with the guidance on the use test recently published by the Basel Committee ("The IRB Use Test: Background and Implementation", Basel Committee Newsletter No.9 (September 2006), Basel Committee on Banking Supervision).

AIs are required to demonstrate initial use of the internal ratings and default and loss estimates for internal purposes in at least three areas set out in Paragraph 5.4.2 of CA-G-4. These are (a) credit approval, (b) credit monitoring, and (c) reporting of credit risk information to the AIs' senior management and the Board of Directors. Each AI should also have a definite plan for extending internal use to the majority of other areas specified in CA-G-4, where possible having regard to the circumstances of individual AIs. The plan should be approved by the AIs' Board of Directors or senior management, and is subject to the HKMA's agreement.

Q.5 What evidence of use will the HKMA require from AIs?

A.5 AIs will need to demonstrate to the HKMA that they meet the use test requirement. While the use of internal ratings and default and loss estimates for internal purposes may vary by AI and portfolio type, the HKMA will normally expect IRB applicant AIs to have the following evidence to demonstrate compliance with the use test:

1. The use of rating grades and default and loss estimates should be articulated in the relevant policies approved by senior management or the Board.

2. For each area of use, there should be clear indication that information generated by the IRB systems plays an essential role in internal decision making, and that there is a clear relationship between information from a rating system and the decisions made or actions taken (such indication should be able to facilitate the internal audit review as required in the fourth point below).

3. Users of the information generated by the IRB systems should be able to articulate how the information generated by the IRB systems is used, or the role played by the information in internal decision making.

4. Regular internal audit reviews should be conducted to verify whether the use of the information generated by the IRB systems complies with the AI's policies.

"Essential role" means that the way information from the IRB systems is used should have a direct and observable influence on internal decision making. Internal ratings and default and loss estimates that are used as auxiliary or reference information will not normally be considered as having met the requirement.