Foreign exchange risk management

by the Banking Policy Department

In September 2004 the HKMA issued a guidance note on "Foreign Exchange Risk Management" to all authorized institutions (AIs). This guidance note, which supersedes the guideline issued in 1990, is aimed at developing the HKMA's supervisory approach to foreign exchange risk and providing more guidance to AIs on the key elements of effective foreign exchange risk management.

In addition to the risk management aspects of foreign exchange operations, specific guidance is given on the monitoring and control of foreign exchange settlement risk and exposures of borrowers to exchange rate risk. Readers can have on-line access to the guidance note by clicking the "Supervisory Policy Manual" icon in the HKMA's public website (**www.hkma.gov.hk**).

AIs are expected to put in place the necessary systems and procedures to comply with the relevant requirements of the guidance note by 18 June 2005. During its on-going supervision, the HKMA will monitor the AIs' progress in enhancing their systems and procedures to meet the new standards. This memo addresses some common questions raised by AIs regarding the revised supervisory approach to managing foreign exchange risk.

Q1. Are locally incorporated AIs required to maintain their aggregate foreign currency open positions within 25% of their capital base?

A1. In line with its approach to placing more reliance on the internal risk management systems of AIs, the HKMA has withdrawn all guideline limits set in the past on foreign currency open positions. AIs are now expected to set their own internal overnight limits, and to notify the HKMA of such limits. In reviewing the limits of locally incorporated AIs, the HKMA will pay particular attention to those AIs with relatively large aggregate open positions (for example, exceeding 25% of their capital base), which may reflect concentration of foreign exchange risk. They will be asked to provide justifications for setting such limits. This does not, however, mean that the HKMA will not allow AIs to maintain higher limits due to genuine business needs or justifications. In other words, the 25% figure quoted in the guidance note should not be construed as a supervisory limit.

Q2. How will the HKMA determine whether a locally incorporated AI has adequate justification for maintaining a relatively large aggregate open position limit (for example, higher than 25% of the AI's capital base)?

A2. In determining whether it is acceptable for an AI to maintain higher open position limits, the HKMA will have primary regard to the level of risk incurred by the AI and its ability to withstand the risk. Consideration will also be given to the nature of the AI's operations and other business factors, such as the need for accommodating a larger volume of customer transactions or other core operations. However, where such higher limits are used solely for trading or short-term risk-taking activities, supervisory concern may be raised.

Q3. AIs taking significant foreign exchange risk are expected to emphase on using stress-testing techniques to evaluate whether their capital is adequate to support the risk. How will an AI be considered as taking "significant" foreign exchange risk in this regard?

A3. The HKMA does not want to be too prescriptive about what we mean by "significant" foreign exchange risk. AIs should assess the level of their foreign exchange risk (relative to profitability and capital base) based on their own measure of market risk using the value-at-risk (VaR) or standardised approach under the market risk capital adequacy regime (see CA-G-2 "Maintenance of Adequate Capital Against Market Risk" of the HKMA's Supervisory Policy Manual).

Q4. It may be difficult for an AI to know the overall foreign exchange exposure of a particular customer for assessing the impact of adverse exchange rate movements on the customer's positions with the AI. Will the HKMA take into account this difficulty in assessing the effectiveness of an AI's procedures for evaluating borrowers' capability of servicing their foreign currency obligations?

A4. It is recognised that AIs may not always be in a position to know a particular customer's overall foreign exchange exposure. As such, the HKMA would mainly expect an AI to assess the customer's capability of servicing his or her foreign currency obligations based on information available to the AI only. For example, stress tests should be conducted to assess the impact of adverse exchange rate movements on the customer's positions with the AI (see paragraph 7.1.3 of the guidance note).

Q5. Can VaR and stress analysis be used to measure the aggregate open position risk?

A5. The HKMA has not precluded the use of VaR for measuring aggregate foreign exchange risk (see the second bullet of paragraph 5.5.3 of the guidance note). Nevertheless, AIs should be aware that the VaR methodology has its limitations. For example, during the 1997-98 Asian financial crisis, the volatility of some Asian currencies increased suddenly and in an extraordinary manner because of severe shocks in the foreign exchange market. The VaR calculated under such conditions would lag behind and underestimate the movements of foreign exchange rates. This is a well-known weakness of the VaR methodology. AIs that do not set the overall open position limit based on the aggregate of net open positions for all foreign currencies should therefore demonstrate to the HKMA that the use of VaR and stress-testing is sufficient for measuring the aggregate foreign exchange risk.

Q6. Given the dynamics of the foreign exchange market, business opportunities and customers' demand, would it be more appropriate for AIs to notify the HKMA of their foreign exchange limits during the periodic audits rather than whenever a limit changes?

A6. The HKMA recognises that there will be occasions when AIs' internal limits have to be promptly adjusted to meet market conditions, and it would be difficult for the AIs to notify the

HKMA of such changes in advance. The HKMA will allow for flexibility in notifying the limits after they have been adjusted. Nevertheless, in order to facilitate the HKMA's ongoing evaluation of the level of foreign exchange risk assumed by AIs, AIs will still be expected to notify the HKMA of any changes in their overnight limits at the institution-wide level as soon as practicable.

Q7. To ensure effective management of foreign exchange settlement risk, AIs are expected to conduct stress tests to evaluate their capacity of withstanding stressed situations such as settlement delay, individual counterparty failures and disruption of payment systems. How should such stress tests be conducted?

A7. AIs are expected to design stressed scenarios that are appropriate to the nature and complexity of their foreign exchange operations. For example, an AI may estimate the potential loss or impact on its cash flows arising from: (i) the delay in settlement of its transactions for a specified period of time; (ii) the default of one or more of its major counterparties upon settlement; or (iii) a temporary disruption of payment systems due to IT problems.

Q8. For some banking groups that take a global approach to managing risk, an excess over the foreign exchange limits may not necessarily mean a significant risk to the entity in Hong Kong as offsetting positions may be taken by other entities outside Hong Kong. What is the HKMA's supervisory approach to such cases?

A8. AIs are expected to manage their foreign exchange risk at the entity level in Hong Kong. The HKMA accepts that in some cases the risk management approach adopted by an AI is monitored on a group basis by its head or regional office. This practice is generally acceptable so long as the AI manages its foreign exchange risk properly according to established policies. AIs adopting this approach should discuss the arrangement with the HKMA.