Banking Stability

In 2007 Hong Kong became one of the first jurisdictions to implement Basel II, the new international standard for capital and risk management. Approval for the adoption of the Internal Ratings-based approach was granted to four authorized institutions. The HKMA also continued to improve its banking supervisory approach through the wider use of thematic reviews to promote good risk management and internal control practices in various areas of business. Particular attention was also paid to assessing the impact of the US sub-prime mortgage crisis on individual authorized institutions and the banking sector as a whole. The Deposit Protection Scheme marked the first anniversary of its operation on 25 September 2007.

OBJECTIVES

Promoting the safety and stability of the banking system through the regulation of banking and deposit-taking businesses and the supervision of authorized institutions (AIs)[1] is a primary function of the HKMA. The responsibility is shared among three departments:

- the Banking Supervision Department handles the day-to-day supervision of AIs
- the Banking Policy Department formulates supervisory policies to promote the safety and soundness of the banking sector
- the Banking Development Department formulates policies to promote the development of the banking industry.

REVIEW OF 2007

Risk-based supervision

More resources were devoted to conducting thematic examinations of AIs covering selected lines of business and major risk areas during the year. The aim was to enable the HKMA to promote good risk management and internal control practices and to identify specific issues requiring guidance to be issued to assist AIs to improve the effectiveness of their risk management and control practices.

A total of 246 on-site examinations were performed in 2007. Nearly half (106) were thematic examinations on a range of business activities of AIs, including assessing their compliance with the business restrictions on renminbi business and the Qualified Domestic Institutional Investors (QDII) scheme; retail wealth management activities; control over registration of relevant individuals (Rel) for securities business; operational risk management; IT problems and system change management; and 24 examinations on AIs' anti-money-laundering (AML) and counter-terrorist-financing (CFT) controls over customer due diligence, on-going transaction monitoring and remittance transactions.

Deputy Chief Executive Y K Choi (second from left) and the three Executive Directors in charge of banking matters at the annual press conference "Hong Kong Banking Sector: 2007 End-Year Review and Prospect and Priorities for 2008".

[1] Institutions authorized under the Banking Ordinance to carry on banking business or the business of taking deposits. Authorized institutions are divided into three tiers: licensed banks, restricted licence banks and deposit-taking companies.

The HKMA conducted 86 risk-based and nine overseas examinations, including reviews of certain AIs' operations in Mainland China. Specialist teams also carried out detailed examinations of risk management controls in specific areas, including AIs' treasury and derivatives activities, business continuity planning, e-banking activities and technology risk management and practice; and tier-2[2] examinations of the securities business of AIs and their procedures to combat money laundering and terrorist financing.

The HKMA performed specialised reviews on the qualitative, quantitative and IT system aspects of internal rating systems to assess the readiness of AIs intending to implement either the foundation or advanced Internal Ratings-based (IRB) approach for credit risk under Basel II in 2007 or 2008 (*see separate box on Basel II implementation for details*).

In addition to on-site examinations, 193 off-site reviews were conducted and 39 tripartite meetings[3] held. Other duties included the approval of acquisitions of local AIs and handling of non-compliance with guidelines or statutory requirements. The supervisory teams met the boards of four banks and members of board-level committees, in particular the audit committees, of 13 other banks and one restricted licence bank.

The Banking Supervision Review Committee considered 10 cases relating to the licensing of AIs and money brokers and two cases concerning possible contraventions of the Banking Ordinance by AIs. In addition, 296 applications to become controllers, directors, chief executives and alternate chief executives of AIs were approved. Details of the operational supervisory work performed in 2007 are set out in Table 1.

Table 1. Operational supervision

		2006	**2007**
1.	On-site examinations	247	**246**
	Regular examinations	96	**95**
	– risk-based	86	**86**
	– overseas	10	**9**
	Basel II – IRB validation		**15**
	– qualitative	–	**5**
	– quantitative	–	**5**
	– IT aspects	–	**5**
	Specialised examinations	40	**30**
	– treasury and derivatives activities	9	**10**
	– securities (tier-2)	7	**7**
	– business continuity plan	15	**5**
	– e-banking activities and technology risk management	5	**5**
	– AML/CFT controls (tier-2)	4	**3**
	Thematic examinations	111	**106**
	– renminbi banking business	25	**22**
	– QDII scheme	–	**7**
	– retail wealth management	22	**18**
	– relevant individuals registration controls for securities business	–	**11**
	– IT problems and system change management	–	**13**
	– operational risk management	–	**11**
	– AML/CFT controls over correspondent banking and private banking	22	**–**
	– AML/CFT customer due diligence	–	**8**
	– AML/CFT on-going transaction monitoring	–	**6**
	– AML/CFT implementation of FATF special recommendation VII in remittance transactions	–	**10**
	– controls for protecting customer data	15	**–**
	– implementation of Standardised (credit risk) approach and the IRB approach under Basel II	17	**–**
	– investment advisory activities	10	**–**
2.	Off-site reviews and prudential interviews	185	**193**
3.	Tripartite meetings	51	**39**
4.	Meetings with boards of directors or board-level committees of AIs	21	**18**
5.	Approval of applications to become controllers, directors, chief executives, alternate chief executives of AIs	278	**296**
6.	Reports commissioned under Section 59(2) of the Banking Ordinance	1	**3**
7.	Cases considered by the Banking Supervision Review Committee	15	**12**

[2] Tier-1 examinations are high-level examinations which assess and evaluate the adequacy of AIs' general management controls over the areas being examined. Tier-2 examinations are more detailed and focused assessments of the effectiveness of the AIs' relevant controls, including detailed testing and verification.

[3] An annual meeting between the HKMA and an AI and its auditors.

The Monetary Authority used his powers under Section 59(2) of the Banking Ordinance to require three AIs to commission external auditors to review, respectively, their operational controls, AML controls and liquidity management and to report their findings to the HKMA. Another two AIs voluntarily appointed external auditors to review their controls on selected areas identified by the HKMA. Improvements were subsequently implemented.

During 2007, no AI breached the requirements of the Banking Ordinance relating to the capital adequacy ratio (CAR). One locally incorporated deposit-taking company and one foreign bank branch were found to have breached the liquidity ratio requirement for a short period because of technical errors. However, the breaches were rectified promptly once the problems were discovered. They did not pose any threat to the safety and soundness of the institutions or to the interests of depositors. There was one breach of the requirements under Section 81 relating to large exposures, one under Section 83 on connected lending, one under Section 85 on lending to AI's employees, and one under Section 87 relating to the shareholding by an AI. These breaches were assessed to be unintentional. They were rectified promptly by the AIs and did not affect the interests of depositors.

Powers under Section 52 of the Banking Ordinance

The appointment of a Manager, on 16 September 2005, under Section 52(1)(C) of the Banking Ordinance to manage the affairs, business and property of Delta Asia Credit Limited (DAC), a deposit-taking company, remained in effect during 2007. The HKMA continued to communicate closely with the relevant authorities to monitor developments related to DAC and its parent bank in Macau, and to review regularly the supervisory measures to safeguard the interests of DAC's depositors and the integrity of the banking system. During the year, the Monetary Authority also appointed an Advisor under Section 52(1)(B) of the Banking Ordinance to advise the management of Octopus Cards Limited (OCL), among other things, on matters relating to protection of cardholders' interests.

CAMEL[4] rating review

Following the implementation of the supervisory review process (SRP) for locally incorporated AIs under Pillar 2 of Basel II in January 2007, the HKMA reviewed the CAMEL rating process to ensure consistency of assessment standards and to minimise any duplication between the two. To make the CAMEL rating scale for local AIs more detailed, the 5-grade system has been expanded to 13 grades to improve its risk differentiation. The 5-grade CAMEL scale will continue to apply to foreign AIs.

During the year, the CAMEL Approval Committee met 17 times to determine the ratings of individual AIs. One bank requested a review of its ratings and a meeting of the CAMEL Approval Review Committee, formed by members not involved in the original rating decision, was convened to consider the request.

The CAMEL ratings of licensed banks on 20 October 2007 were used as the supervisory ratings provided to the Hong Kong Deposit Protection Board for the purpose of determining the contributions to be paid by the banks in 2008 under the Deposit Protection Scheme.

Specialised supervisory work

Supervision of technology and operational risks

Internet banking, technology risk and business continuity management

The utilisation of Internet banking services continued to show healthy growth following the launch of two-factor authentication in 2005. There were 4.9 million personal and 307,000 business Internet banking accounts at the end of 2007 (compared with 3.8 million and 234,000 respectively in 2006). Thirty-two AIs have implemented the two-factor authentication mechanism. The HKMA worked with the Hong Kong Association of Banks and the Hong Kong Police Force to launch, in April 2007, a new

[4] An internationally recognised framework for assessing the quality of banks based on **C**apital adequacy, **A**sset quality, **M**anagement, **E**arnings and **L**iquidity.

educational leaflet *Internet Banking – Convenient & Safe* to provide up-to-date security tips on Internet banking for the public.

In view of the upsurge in equity market transactions since mid-2007, the HKMA has strengthened its supervisory efforts, particularly in monitoring the utilisation of the on-line securities trading systems of major AIs. A circular was issued to AIs offering retail Internet banking services, reminding them to ensure their on-line securities trading systems could cope with anticipated business growth. Where system-capacity issues were identified, the HKMA required the AIs concerned to strengthen their systems. Of the 12 AIs involved, most had adequately expanded their system capacities before the end of 2007. The remaining AIs were expected to complete system upgrading by April 2008.

The annual self-assessments of technology risk management by AIs indicated that there should be an increased focus on controls over IT problems and system change management. The HKMA conducted thematic examinations of 13 AIs and found room for improvement in certain aspects of controls over IT incident management and the implementation of emergency changes to IT systems. A circular was issued to all AIs to share with the banking industry the common issues identified and the good practices adopted by some of the AIs examined.

As part of its continued upgrading of its supervisory efforts, the HKMA has extended the coverage of the automated control self-assessment process for technology risk management, Internet banking and business continuity management to 61 AIs. The self-assessment results indicate a significant improvement in the overall IT controls of AIs since the process was launched in 2003.

The HKMA continues to participate in the International Information Technology Supervisors' Conference to share experience and knowledge with overseas banking supervisors on Internet banking and technology risks, particularly emerging fraudulent techniques.

Operational risk management

A specialist team was established to develop a supervisory framework for assessing the adequacy and effectiveness of AIs' operational risk management due to the growing importance of this issue. A profiling system was devised to assist on-going assessments and monitoring of these risks. A structured process was also established to support the review of applications from AIs wanting to adopt the Standardised Approach (STO) or Alternative Standardised Approach (ASA) for operational risk calculation under the Basel II framework, in line with the practices of leading overseas regulators. A pilot scheme was conducted in the fourth quarter of 2007. In addition, validation examinations were conducted for the STO or ASA applications of 10 AIs.

Supervision of securities and insurance businesses

The HKMA co-operates closely with the Securities and Futures Commission (SFC) on matters of common supervisory interest. The two regulators communicate regularly to discuss supervision of the securities business of registered institutions (RIs)[5]. The HKMA also worked with the SFC and industry practitioners to devise a new measure to prevent multiple applications for initial public offerings. A circular was issued in March 2007 drawing the attention of AIs to the new measure as well as recommended practices to identify and reject multiple applications.

5 A registered institution is an AI which is registered under the Securities and Futures Ordinance to conduct securities intermediary activities.

Circulars were issued in 2007 to highlight the major issues and good practices identified in the joint HKMA and SFC thematic examinations on investment advisory activities completed in the second half of 2006. RIs were recommended to establish controls and procedures to ensure compliance with the regulatory standards set out in the SFC's report of the examination findings.

One of the key focuses of the securities supervisory regime in 2007 was to ensure that RIs engage only fit and proper individuals, with appropriate registration, to conduct securities business. Thematic examinations conducted by the HKMA in 2007 showed that the controls of most of the examined RIs were effective, although some were advised to strengthen their procedures for performing background checks. A circular was also issued in June recommending RIs to prevent unregistered dealings by implementing adequate procedures.

In 2007 the HKMA processed 11 applications for registration to become RIs and five applications from RIs to engage in additional regulated activities. It also granted consent to 151 executive officers, who are responsible for supervising the securities activities of RIs; and conducted background checks on 5,541 individuals whose information was submitted by RIs for registration.

The number of RIs participating in the automated control self-assessment on securities activities increased to 45. There has been continued improvement in the self-assessment results since the process was launched in 2005.

A meeting was held between the HKMA and the Insurance Authority in October 2007 to discuss current and evolving supervisory issues. The two authorities agreed on ways to improve communication in relation to the supervision of AIs' insurance activities. Day-to-day co-operation continued on the handling of insurance-related complaints under mutually agreed procedures.

Supervision of treasury activities

During 2007, the HKMA conducted 10 treasury examinations, focusing on AIs' risk management processes and internal controls over the risks arising from their treasury and derivatives activities. The results of these examinations indicated that AIs generally have adequate and effective risk management frameworks and internal controls for these activities. Regular meetings were held with AIs' heads of treasury operations to understand any emerging risks the AIs encountered and how they managed those risks. In particular, the HKMA continued to monitor the impact of the US sub-prime crisis on Hong Kong's banking industry.

China-related businesses

Renminbi banking business

At the end of 2007, 38 licensed banks were eligible to conduct renminbi banking business. The total amount of renminbi deposits reached RMB33.4 billion, representing a 42.7% increase from a year earlier. With the State Council's approval earlier in the year, qualified Mainland financial institutions were allowed to issue renminbi bonds in Hong Kong and Participating Banks in renminbi business were allowed to provide the associated services from June 2007. These include opening deposit accounts for renminbi bond issuers and underwriters, remitting renminbi bond proceeds to Mainland China, providing a one-way exchange service (from renminbi to Hong Kong dollars) for renminbi bond issuers to settle expenses incurred in bond issuance, and trading renminbi bonds for proprietary and customer accounts. The expanded scope of renminbi banking business allows renminbi deposit account holders in Hong Kong to invest directly in renminbi bonds, and provides an opportunity for Participating Banks to diversify their renminbi asset portfolio.

The HKMA monitored the renminbi business conducted by the Participating Banks, set out the supervisory requirements regarding the expanded scope of renminbi business, and revised the related prudential returns to facilitate supervision and surveillance. While the results of earlier examinations indicated that Participating Banks' internal controls were generally effective and in line with regulatory requirements, the HKMA issued a circular in March 2007 to remind them of compliance issues that needed further improvement.

Relaxation of overseas investments by Mainland residents

In the second quarter of 2007, the China Banking Regulatory Commission (CBRC) expanded the scope of overseas wealth management services that can be provided by commercial banks operating on the Mainland under the QDII scheme. Subject to specific conditions, qualified commercial banks can invest on behalf of customers in equities and related products in an overseas market where the regulator has signed a Memorandum of Understanding with the CBRC. Hong Kong became the first such market. At the end of 2007, the Mainland subsidiaries of six banks incorporated in Hong Kong had been given approval to provide the overseas wealth management services. Late in the year, the HKMA conducted a round of thematic examinations of seven banks whose Hong Kong offices were performing functions in support of the overseas wealth management services provided by Mainland banks. By early 2008, the results were being reviewed and major issues found will be shared with the industry.

The joint working group formed by the CBRC, the State Administration of Foreign Exchange, the HKMA and the SFC met during the year to discuss ways to further improve the scheme as well as the development of training programmes on retail wealth management for Mainland practitioners. The working group provided support to the China Banking Association and the Hong Kong Institute of Bankers in conducting a two-day seminar on wealth management in Beijing in June with the emphasis on institutional risk management and sales practices of frontline staff. Similar training programmes are expected to be arranged in the future.

Tapping the Mainland market

From December 2006, foreign banks, including those incorporated in Hong Kong, can conduct a full range of retail banking business on the Mainland by converting their Mainland branches into domestically incorporated banks. At the end of 2007, five Hong Kong-incorporated banks had restructured their Mainland branches to Mainland-incorporated subsidiary banks with a total of over 130 branches and sub-branches. With the increased presence of Hong Kong banks on the Mainland, the HKMA continued to monitor their business strategies and maintained regular contact with the CBRC to improve cross-border supervisory co-operation and co-ordination.

The HKMA also maintained close surveillance of AIs' non-bank China exposures. Following expansion of the scope of prudential reporting in September 2006, the HKMA made further revisions in December 2007 to capture credit exposures booked in the Mainland banking subsidiaries of Hong Kong-incorporated banks. At the end of 2007, the industry's aggregate on-balance sheet non-bank China exposures amounted to $592.2 billion or 5.2% of total assets.

Hong Kong-incorporated banks have gained greater access to the Mainland market since the implementation of the Closer Economic Partnership Arrangement (CEPA) in January 2004. By the end of 2007, five local banks that had benefited under CEPA had established nine branches or sub-branches on the Mainland. The latest improvements to CEPA, which became effective from January 2008, relax the criteria for Hong Kong-incorporated banks to gain the status of Hong Kong Service Supplier (a prerequisite for an entity to enjoy the benefits under CEPA) and to acquire shareholdings in Mainland banks. The Mainland authorities will also expedite the processing of Hong Kong banks' applications to establish branches in specific regions on the Mainland, including Guangdong Province.

Octopus Cards Advisor appointed

In February 2007, a number of incidents came to light of Octopus cardholders being unable to add value to their cards through the Easy Pay System (EPS) channel despite the funds being deducted from their bank accounts.

To ensure that the interests of cardholders were adequately protected, on 16 February 2007 the Monetary Authority served notice on OCL under Section 59(2) of the Banking Ordinance, requiring the company to submit an independent auditor's report on the operation of add-value services through EPS and OCL's operational risk control. After consultation with the Financial Secretary, the Monetary Authority also appointed an Advisor under Section 52(1)(B) of the Banking Ordinance to advise the management of OCL on matters relating to the protection of cardholders' interests and recommendations arising from the independent auditor's report.

The HKMA also requested OCL to review all its available records to identify whether there were other failed Octopus EPS add-value transactions and to make refunds to affected cardholders. As a result, in addition to the 571 failed Octopus EPS add-value transactions between 5 December 2006 and 3 February 2007, OCL identified approximately 15,300 potential affected transactions, which happened between 1 January 2000 and early-December 2006, involving approximately $3.7 million. OCL started making refunds for these transactions in August 2007 and over 98% of them had been refunded by the end of the year.

The investigation of the independent auditor revealed that the failed Octopus EPS add-value transactions were mainly caused by design issues in some components of the add-value process, but these were not expected to pose systemic risk to other add-value channels or other parts of OCL's operations. The independent auditor has made a number of recommendations to improve OCL's operational risk management and the HKMA will monitor their implementation.

Credit risk management and asset quality

Despite the overall improvement in asset quality among AIs over the past few years, the HKMA was concerned about whether the continuing intense market competition in 2007 had resulted in any undue relaxation in underwriting criteria in the banking industry. During the year, supervisory resources were devoted to reviewing this area, particularly the level of exceptional credit approvals granted by individual AIs in areas such as debt-servicing ratios in residential mortgage lending, and taxi loan financing. While there was no clear trend of relaxation in underwriting criteria, the HKMA required some AIs to implement more stringent controls over exceptional credit approvals.

Co-operation with overseas supervisors

The exposure of banks around the world to emerging risks and the increased globalisation of banking activities have heightened the need for supervisors to co-operate more closely, both geographically and functionally. To enhance the exchange of supervisory information and co-operation, the HKMA has entered into Memoranda of Understanding or other formal arrangements with a number of overseas banking supervisory authorities. In 2007, Statements of Co-operation were signed with the Bank of Thailand, the Federal Deposit Insurance Corporation and the Office of Thrift Supervision in the US, and a Memorandum of Understanding with the Bangko Sentral ng Pilipinas.

Meetings to discuss supervisory issues of common interest were also held during the year in Hong Kong and abroad with banking supervisory authorities from the Mainland, Macau, Indonesia, Japan, Malaysia, the Netherlands, Pakistan, the Philippines, Singapore, South Korea, Switzerland, Taiwan, Thailand, the UK, the US and Vietnam.

Risks posed by the sub-prime crisis

Impact on the Hong Kong banking sector

The HKMA began closely monitoring individual AIs' exposures to US sub-prime mortgages in mid-2007. The Authority also stress-tested the financial positions of local banks that reported sub-prime or related exposures. The stress-testing results indicate that the banks' capital positions are resilient to even a severe spill-over of the impact of the sub-prime crisis.

Based on the information submitted by AIs, the aggregate exposures of the Hong Kong banking sector to the US sub-prime or sub-prime-related instruments, including exposures to Structured Investment Vehicles, are not significant relative to the sector's total assets and do not pose any systemic risk to the banking sector. While the profitability of individual AIs with larger exposures could be more affected, this would not affect the safety and soundness of these AIs given their relatively well-capitalised and highly liquid positions. The HKMA will continue to monitor the situation and hold discussions with the management of AIs to ensure they manage their sub-prime-related exposures effectively and prudently.

Latest developments and impact on interbank liquidity

For foreign banks operating in Hong Kong, the tightening effect of the sub-prime fallout on the interbank market since August 2007 has been small. In general, the Hong Kong dollar interbank market continued to function normally and foreign banks did not encounter much difficulty in obtaining funds to meet their usual liquidity requirements, particularly in borrowing shorter-maturity funds.

Basel II implementation

The Banking (Capital) Rules and the Banking (Disclosure) Rules came into effect on 1 January 2007, making Hong Kong one of the first jurisdictions to implement Basel II. These Rules prescribe how the CARs of Hong Kong-incorporated AIs are to be calculated and what information on the state of affairs, profit and loss, and CAR is to be publicly disclosed by them, in line with the recommendations under Pillars 1 and 3 of the Basel II framework.

Capital impact under the revised framework

AIs reported their CAR calculations under the Banking (Capital) Rules starting from their positions at the end of March 2007. The reported figures confirmed that the capital position of the banking sector continued to be strong under the revised framework, despite a slight drop in the average CAR mainly because of the additional operational risk capital charge. On an individual AI level, the CARs reported by AIs were all above their statutory minimum ratios.

During the year, a number of AIs that had applied to adopt the IRB approach submitted their "parallel run" figures to the HKMA to demonstrate the robustness of their internal rating systems. These figures consisted of two sets of CAR calculations, one based on the approach they were currently using to calculate credit risk, and the other on the IRB approach. The submissions indicated that most of the AIs would be able to achieve capital savings with the use of the IRB approach.

Supplementary guidance on revised framework

To assist AIs in complying with the Banking (Capital) Rules, the HKMA issued supplementary guidance in a structured question-and-answer form, focusing on the more advanced approaches set out in the Capital Rules in relation to credit and market risks. Similarly, for the Banking (Disclosure) Rules, the HKMA issued a Supervisory Policy Manual (SPM) module "Guideline on the Application of the Banking (Disclosure) Rules" and a set of questions and answers to provide further guidance on how certain provisions of the Disclosure Rules should be applied.

In addition, the HKMA released in September an SPM module on the "Overview of Capital Adequacy Regime for Locally Incorporated Authorized Institutions". Setting out the legal basis and the key aspects of the revised capital adequacy framework, the module is a one-stop reference for AIs and other interested parties.

Supervisory review process under Pillar 2

The new assessment framework developed for the SRP has been implemented since 1 January 2007. The SRP, which is conducted as part of the risk-based supervisory process, has improved the HKMA's ability to evaluate and monitor individual AIs' capital adequacy and to determine their minimum CAR under the Banking Ordinance. The process takes into account their overall risk profile, including their risk management systems, and the extent of their exposure to residual risks not covered under the Banking (Capital) Rules, and their approach to conducting internal capital adequacy assessments. The SRP also facilitates the setting of supervisory priorities for individual AIs and allows the identification of key banking risks, or changes in those risks over time, within the banking sector.

During the year, the HKMA completed the first round of the SRP on Hong Kong-incorporated AIs using the new assessment framework. The SRP Approval Committee, comprising senior members of the Banking Supervision and Banking Policy Departments, reviewed the assessment results of individual AIs to determine their minimum CAR and other supervisory issues requiring attention. AIs were notified of the results and were given the opportunity to request a review of their minimum ratios although no AIs did so in 2007. The HKMA will continue to upgrade the framework by identifying areas where refinements can be made.

Capital adequacy assessment process (CAAP)

A major objective of the SRP assessment framework is to provide the impetus for AIs to adopt better capital planning and management practices. This is achieved by requiring AIs to have an internal process for assessing their overall capital adequacy commensurate with the risk profile of their operations and a strategy for maintaining such capital levels. This internal process is commonly referred to as the CAAP. Given that many AIs are still in the early stages of developing their CAAP capabilities, the HKMA has not required AIs to have a well-developed CAAP, but expects them to have a concrete plan to adopt a CAAP that meets supervisory standards. In 2007, most AIs were still developing or upgrading their CAAPs with the HKMA monitoring their progress, requiring them to submit regular reports, and reviewing their documentation, including policy and project plans.

Assessment of AIs' readiness for the IRB approach

The HKMA has completed the assessment of applications from AIs planning to adopt either the foundation or advanced IRB approach for credit risk in 2007 or 2008. During the year, approvals were given to four AIs to adopt their chosen IRB approach for regulatory capital reporting purposes from the end of December 2007 or January 2008. The decisions were made based on the results of on-site examinations covering the quantitative and qualitative aspects of the internal rating systems, the relevant supporting

IT systems, data infrastructure, and the regulatory capital reporting platform adopted by these AIs for their compliance with the relevant requirements set out in the Banking (Capital) Rules.

Home/host co-operation

In arriving at the IRB approval decisions for the subsidiaries of foreign banking groups planning to adopt the IRB approach in Hong Kong, the HKMA, as host supervisor, has considered the assessments made by their home supervisors. In particular, the HKMA has relied on the home supervisors' reviews of the group-developed internal rating systems that are used by the subsidiaries in Hong Kong mainly for non-retail exposures. This was done to avoid supervisory overlap and reduce the regulatory burden on banks. To facilitate home and host co-operation, the HKMA participated in supervisory meetings and model review visits organised by the home supervisors for selected individual foreign banking groups. The two-way contact enables each party to stay informed about the IRB approval progress of individual banking groups, and to discuss issues of mutual interest identified by the reviews.

Counterparty credit risk

In line with its plan for Basel II implementation, the HKMA conducted a study in 2007 to determine its strategy for implementing the more advanced approaches to calculate counterparty credit risk (CCR)[6]. A survey of 15 selected AIs showed that most did not have immediate plans to use the advanced CCR approaches, and there was scope for improving their CCR management practices to align with the standards required under those approaches. As a result, the HKMA decided that priority should be given to promoting sound practices of CCR management within the banking sector through developing a supervisory guideline on CCR management in 2008, before finalising a strategy for implementing the advanced CCR approaches.

> Basel II

[6] CCR is the risk that the counterparty to a transaction may default before the final settlement of the transaction's cash flows. It creates a bilateral risk of loss to either counterparty to the transaction with uncertain market values that can vary over time with the movement of underlying market factors.

Improving the supervisory framework

Management of strategic and reputation risks

Strategic and reputation risks are two of the eight major types of inherent risk[7] identified by the HKMA to be assessed under its risk-based supervisory process. AIs' ability to manage these risks reflects fundamentally the quality and competence of their management, and is crucial to maintaining a successful and sustainable business, especially in view of rapid changes in the business environment in which they operate. The HKMA has developed two new SPM modules on "Strategic Risk Management" and "Reputation Risk Management" to strengthen its approach to supervising these risks and provide more guidance to AIs on how these risks should be managed. The former was issued as a guidance note in December after industry consultation, while the latter will undergo industry consultation in early 2008.

Stress-testing

The HKMA has regularly conducted supervisory stress tests on selected AIs to assess the resilience of the banking sector to risks and vulnerabilities within the financial system. In order to make the stress-testing programme more forward-looking and align its results more closely with changes in economic conditions, the HKMA has strengthened the programme by making use of macroeconomic credit risk models to estimate

[7] The other six inherent risks are credit, market, interest rate, liquidity, operational and legal risks.

credit losses based on economic indicators such as GDP, property prices and interest rates. Because of the increasing volatility of the stock market and market events arising from the US sub-prime crisis, the HKMA has also incorporated additional stress scenarios to assess the possible impact of stock market corrections and AIs' direct and indirect exposures to the US sub-prime market on their profitability and capital positions. The stress-testing results showed that despite the severity of the stress scenarios, the banking sector would be able to withstand the stress, although the financial impact on some AIs might be more significant.

Prevention of money laundering and terrorist financing

The effectiveness of the supervisory function of the HKMA in combating money laundering and terrorist financing was strengthened in January with the centralisation of its policy and specialised examination teams into one division. In the second half of 2007, additional resources were provided to the specialised examination teams, which conducted 27 examinations during the year, including three rounds of thematic examinations focusing on customer due diligence for high-risk customers, on-going transaction monitoring and the implementation of Financial Action Task Force (FATF) on Money Laundering Special Recommendation VII on wire transfers.

Established in 2006 under the co-ordination of the HKMA, the Industry Working Group on Prevention of Money Laundering and Terrorist Financing provided a useful forum for the industry to exchange views on topical issues. The Group initiated three guidance papers in 2007. The first provides AIs with guidance on how to handle relationships with politically exposed persons and was issued in November. Two further guidance papers on the customer due diligence process for offshore companies and proof of address for personal customers were in the final stages of industry consultation at the end of the year.

A major task of the HKMA during the year was to assist the Government in the joint mutual evaluation of Hong Kong by the FATF and the Asia/Pacific Group on Money Laundering (APG). A mutual evaluation questionnaire detailing the AML and CFT regime in Hong Kong was submitted to both organisations in April. In November, a team of seven assessors undertook an on-site visit to Hong Kong for two weeks. They met numerous public and private sector organisations, including the Narcotics Division of the Security Bureau (which co-ordinates measures to prevent money laundering and terrorist financing in Hong Kong), the Financial Services and Treasury Bureau, the Department of Justice, law enforcement agencies, financial regulators and various industry bodies. The assessors also interviewed several financial institutions to gauge the effectiveness of Hong Kong's preventative framework. The mutual evaluation report on Hong Kong will be discussed and endorsed by the FATF and APG plenary sessions scheduled for June and July 2008 respectively.

While completing the mutual evaluation questionnaire, the HKMA identified several areas in its guidelines which required amendments in the wake of recent developments including the conclusion of the exercise on Non-co-operative Countries and Territories by the FATF. These minor changes were incorporated into the HKMA's guidelines in November, and a six-month grace period was given to AIs to implement the revised requirements.

International co-operation

The HKMA participates in various international and regional forums for banking supervisors. These include the Basel Committee on Banking Supervision's International Liaison Group, Policy Development Group and various sub-groups, the EMEAP Working Group on Banking Supervision (WGBS), which the HKMA chairs, and the South East Asia, New Zealand and Australia Forum of Banking Supervisors.

As a member of the Basel Committee Accord Implementation Group's Validation Sub-group (AIGV), the HKMA participated in its regular meetings to exchange views on IRB system-related validation issues with other leading supervisors. In October, the HKMA hosted a regular meeting of the AIGV for the first time in Hong

Kong. Following the meeting, the Basel Committee, the Financial Stability Institute, and the EMEAP WGBS jointly organised a regional outreach event in Hong Kong on Basel II implementation in Asia focusing on the IRB approach.

Following the implementation of Basel II, the Basel Committee created two new policy sub-groups in 2007 to review the definition of regulatory capital across jurisdictions in the light of market developments on capital instruments and to analyse national liquidity regimes given the changing nature of liquidity risk due to rapid financial market innovation and integration in recent years. The HKMA participated in the work of both sub-groups. The work of the Working Group on Liquidity, in particular, has grown in significance in view of the market turmoil triggered by the US sub-prime crisis. The Group will give urgent priority to updating and strengthening the core principles and sound practices guides on liquidity risk management and supervision.

One of the objectives of the EMEAP WGBS is to seek common approaches on the adoption and implementation of good risk management and supervisory practices. Members of the WGBS agreed to adopt a guidance paper on "Recognition of External Credit Assessment Institutions (ECAIs) for Basel II" as a minimum standard for member economies. Adoption of the paper, which was prepared with the assistance of the HKMA, will promote consistency and efficiency in the ECAI recognition process among member economies in their Basel II implementation.

In April, the HKMA co-operated with the Bank for International Settlements and 53 other participating economies in the *Triennial Central Bank Survey of Foreign Exchange and Derivatives Market Activity*. The results of the survey showed that Hong Kong remained the sixth largest foreign exchange centre and seventh largest when over-the-counter derivatives were included.

Accounting and disclosure

Since the adoption of International Financial Reporting Standards (IFRS) in Hong Kong in 2005, Hong Kong-incorporated AIs have been required by the HKMA to maintain a regulatory reserve to ensure that changes in accounting standards do not lead to a reduction in the overall level of provisions they hold. This requirement is to acknowledge that accounting provisions only deal with losses already incurred, while the Banking Ordinance requires that AIs must maintain adequate provision for losses which will or may occur. In other words, AIs are required to adopt a more forward-looking approach in the provisioning process to maintain an adequate buffer against future deterioration in credit quality.

The HKMA notes that the requirement to maintain a regulatory reserve is in line with the policy of a number of overseas supervisory authorities' post-IFRS implementation, and considers it appropriate to maintain the requirement, particularly for ensuring the adequacy of provisions when the economy turns down. The HKMA will continue to hold discussions with individual AIs on their provisioning practices to ensure they adopt a conservative approach in determining the appropriate level of provisioning, including the regulatory reserve.

Commercial Credit Reference Agency (CCRA)

The CCRA has been operating smoothly since its establishment in November 2004. At the end of December 2007, the CCRA covered more than 57,000 small- and medium-sized enterprises, defined as non-listed limited companies with an annual turnover not exceeding $50 million. Around 120 AIs were sharing commercial credit data through the CCRA.

The HKMA continues to participate in the Industry Working Group on the CCRA. In 2007, the Group finalised all the implementation details for expanding the coverage of the CCRA, which will be extended to include sole proprietorships and partnerships from 1 March 2008. The continued development of the CCRA will further strengthen the credit risk management of AIs, which in turn will be conducive to improving the safety and soundness of the financial system.

Consumer protection

Code of Banking Practice

The Code of Banking Practice Committee convened by the Hong Kong Association of Banks has been conducting a review of the Code to improve its provisions and keep pace with developments in the banking sector. As a member of the Committee, the HKMA has assisted in the review and contributed to the industry associations. A draft of the revised Code is expected to be ready for consultation with stakeholders in the first half of 2008.

The industry's overall state of compliance with the Code has continued to improve since the introduction of the self-assessment in 2001-2002. The proportion of AIs reporting full or almost full compliance (with five or fewer instances of non-compliance) with the Code increased from 90% to 98.3% in 2005-2006. As a result, the HKMA has reduced the frequency of the self-assessment exercise from every year to every two years.

> Consumer Information > Code of Banking Practice

Customer complaints

The HKMA received 469 complaints about banking services or products of AIs in 2007, compared with 292 the previous year (Chart 1). The increase was across all types of banking products, including deposits, loans, credit cards and securities.

There was a continued reduction in the number of complaints received by AIs against their debt collection agents (DCAs). According to the quarterly returns submitted by AIs since March 2002, the number of DCA-related complaints further decreased to 103 in 2007 from 129 in 2006, indicating AIs remained vigilant in monitoring the performance of their DCAs (Chart 2).

> Consumer Information > Complaints about Banks

Chart 1. Complaints about banking services or products of AIs received by the HKMA

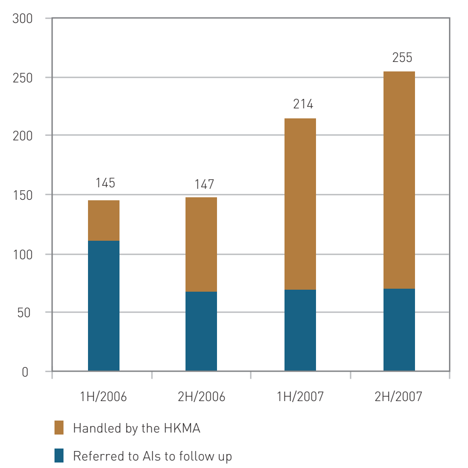
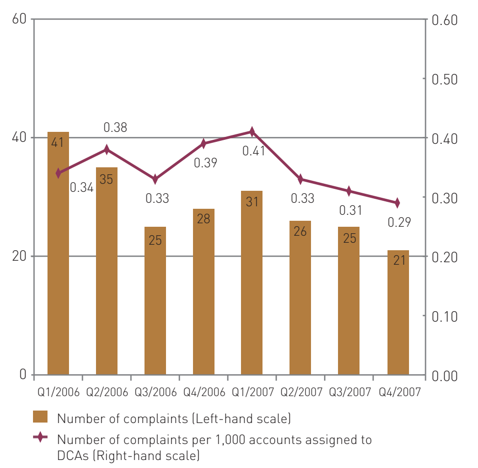


Chart 2. DCA complaints received by AIs



How the HKMA handles customer complaints

The HKMA has no statutory responsibility for consumer protection. It has a limited role in monitoring AIs' handling of customer complaints, and has issued a guideline to AIs requiring them to handle such complaints thoroughly and promptly.

A revised complaint leaflet has been published by the HKMA to provide the public with more information about its role and procedures in handling customer complaints. As explained in the leaflet, the HKMA reviews all complaints it receives to decide whether and how they can be taken further. Its focus is on whether the AI's complaint handling procedures are working properly and, based on the assessment, it will decide whether to refer the complaint to the AI for further investigation. Not all complaints will be referred to AIs. If the matter of the complaint is purely commercial, such as relating to cost or quality of banking services, and the AI has handled the complaint in full, the HKMA will not take any further action. However, if there are concerns about the AI's handling of the complaint, the HKMA will refer it to the AI for re-investigation and further reply to the complainant, normally within 30 days. The HKMA will monitor the AI's handling of the complaint and review the reply to the complainant to check that the procedures are appropriate and working properly.

Consolidation of bank branches

Increased competition in the banking sector, together with the introduction of new technology, has led some banks to consolidate their branches. During the year, a special task force set up by the Hong Kong Association of Banks introduced a number of initiatives to minimise the impact of branch closures on the public. These included a simplified version of ATMs for the elderly, the launch of a community-wide ATM education programme, and the extension of EPS cash-back services to convenience stores in addition to the existing supermarket chains.

Securities enforcement

The HKMA has a shared responsibility with the SFC for the enforcement of the rules and regulations on RIs. During the year

- the HKMA conducted preliminary assessments of 40 cases with potential disciplinary concerns and opened investigations into 14 of them (Chart 3), and completed investigations into 13 cases. In six of these cases, recommendations were made by the Monetary Authority to the SFC to exercise disciplinary powers under Section 196 of the Securities and Futures Ordinance, or warning letters were issued to the RIs and RelS (Chart 4)

- the Monetary Authority took disciplinary action under Section 58A of the Banking Ordinance, the first of its kind, to suspend the particulars of an RelS from the HKMA's register for concealing her securities trading from her employer

- a review of the range of disciplinary sanctions applicable to RIs was conducted. The review, which suggested a more flexible use of fines on RIs, was passed to the SFC

- the frequency of meetings with the SFC on enforcement matters was increased from every six months to every three months, and the side letter to the Memorandum of Understanding was revised in April

- a reciprocal secondment programme with the SFC was established to facilitate mutual understanding of each body's practices to promote consistency in enforcement.

Chart 3. Cases with potential disciplinary concerns reviewed by the HKMA

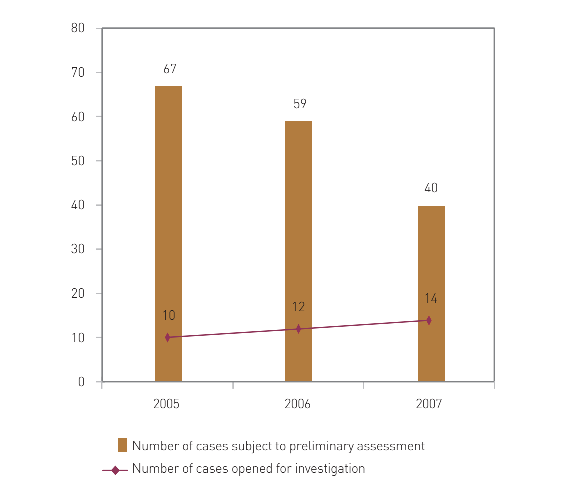
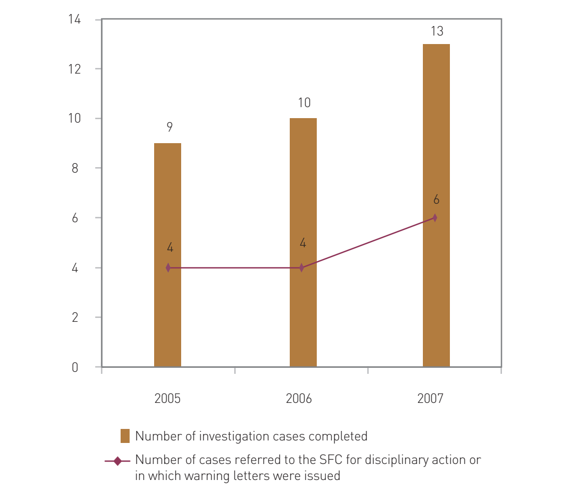


Chart 4. Investigation cases completed



Deposit Protection Scheme

The Hong Kong Deposit Protection Board made good progress in implementing the Deposit Protection Scheme in the first year of its operation. In consultation with industry representatives, the Board devised a number of initiatives to monitor members' compliance with the rules and guidelines governing the operation of the Scheme, which was launched in September 2006. Simulation tests and the payout rehearsal held during the year proved useful in improving the Scheme's readiness for payouts. Opinion surveys conducted in 2007 indicated the Board's publicity activities were effective in fostering and maintaining a high level of public awareness of the Scheme.

Celebrating the first anniversary of the Deposit Protection Scheme are Raymond Li (left), CEO of the Deposit Protection Board who is also Executive Director (Banking Development) of the HKMA, and Professor Andrew Chan, Chairman of the Board.

Licensing

At the end of 2007, Hong Kong had 142 licensed banks, 29 restricted licence banks, 29 deposit-taking companies and 15 approved money brokers. In 2007, the Monetary Authority granted bank licences to seven foreign banks and authorized a transfer of the banking licence of a foreign bank. The Monetary Authority also granted certificates of approval to two money brokers. Three licensed banks, two restricted licence banks and four deposit-taking companies revoked their authorizations.

PLANS FOR 2008 AND BEYOND

Supervisory focus

Credit risk management and asset quality

The local and overseas economic outlook is uncertain given that the full impact of the US sub-prime crisis is still working its way through the global financial system. Tightening credit conditions coupled with the possibility of an economic slowdown in the US and a challenging business environment on the Mainland may have significant implications for the local economy and specific customers of AIs. This could develop into a challenge for Hong Kong's AIs in managing the associated credit risk amid intense market competition. The HKMA will monitor closely the asset quality of individual AIs and assess the adequacy of their systems of internal controls for managing credit risks.

China-related businesses

The HKMA will continue to develop and promote supervisory strategies and policies to help ensure Hong Kong banks develop their China-related businesses in a prudent manner. Contact will be maintained with Mainland authorities to explore new business opportunities and improve cross-border supervisory co-operation. The HKMA will approach the AIs regarding the proposed pilot scheme for Mainland residents to invest directly in listed securities in Hong Kong once details are available to ensure that they have adequate internal controls and operational capacity to cater for the new business.

Supervision of technology and operational risks

Internet banking, technology risk and business continuity management

With the anticipated growth in on-line securities trading and AIs' increasing dependence on technology, the HKMA will step up its supervision of AIs' Internet banking and technology risk management. In particular, two rounds of thematic examinations are planned in 2008 to cover the system-capacity planning and contingency arrangements for on-line securities trading services, and the migration of the Real Time Gross Settlement and Central Moneymarkets Unit systems to the SWIFTNet infrastructure. In addition, detailed on-site examinations will be conducted for the development and support of systems related to Basel II. The HKMA will invite AIs to perform supervisory control self-assessment on Internet banking, technology risk management and business continuity management. It also plans to work with the Hong Kong Association of Banks and the Hong Kong Police Force to develop an effective customer education programme in 2008 to promote sound control practices and awareness of emerging fraudulent techniques.

Operational risk management

Emerging operational risks of AIs will be identified and addressed through specialist on-site examinations or off-site reviews, and an effective supervisory framework will be developed on high-risk areas, such as outsourcing arrangements.

Supervision of securities and insurance businesses

The HKMA will work with the SFC and the Insurance Authority on the supervision of AIs' securities and insurance businesses, including the review of regulatory standards for the selling of investment-linked insurance products.

With the riskier nature of credit-linked investment products and the recent volatile market conditions, the HKMA will conduct thematic examinations of RIs' selling retail credit-linked investment products in 2008. Thematic examinations on the compliance monitoring of securities activities will be performed to ascertain whether RIs have sufficient controls to ensure their securities activities are conducted in compliance with legal and regulatory requirements.

Supervision of treasury activities

The HKMA will undertake a series of examinations in 2008 on the risk management practices and capabilities of selected AIs' treasury operations with regard to their investments in complex structured products. This is designed to identify and recommend sound industry practices for the AIs. The HKMA will also continue its specialised on-site examinations of AIs' treasury operations.

Further specialisation of supervisory work

Following a review of its supervisory process, the HKMA considers further specialisation in the supervision of selected risks and business areas of the banking sector will help improve supervisory efficiency in view of the growing complexity in banking operations. As a result, further specialisation in the supervision of commercial banking, consumer finance, wealth management and private banking will be implemented.

Basel II Implementation

Monitoring and assessment of impact

The HKMA will monitor AIs' compliance with the revised capital adequacy framework and the impact of Basel II on AIs. For banks that have received approval to use the IRB approach, the HKMA will analyse their IRB data to assist the supervisory monitoring of their credit risk profile. To firm up the implementation strategy for other advanced approaches, such as those for the calculation of counterparty credit risk or operational risk, the HKMA will assess AIs' readiness for adopting these approaches. It will also monitor the development of international standards by the Basel Committee, particularly in relation to the definition of capital base, securitisation framework and Pillar 2, and will consider incorporating appropriate changes to the capital adequacy framework, where necessary.

Amendments to the Banking (Capital) Rules and Banking (Disclosure) Rules

In the light of implementation experience and market events which occurred during 2007 (for example, the sub-prime crisis), the HKMA will review the need for amendments to the Banking (Capital) Rules and Banking (Disclosure) Rules. However, it is expected that amendments, if needed, will be mainly for refinement and clarification.

Supervisory recognition for use of IRB approach

In 2008, the recognition process will focus on AIs applying to adopt the IRB approach from 2009 to 2011. On-site examinations of AIs intending to adopt the IRB approach in 2009 have been scheduled and the HKMA will maintain regular dialogue with AIs planning to adopt the IRB approach in 2010 or 2011.

The HKMA will also conduct follow-up reviews of the approved IRB AIs to ensure that issues identified in the previous on-site examinations are fully addressed and appropriate refinements made to their internal rating systems.

Supervisory review process

Implementation of the SRP assessment framework in 2007 has provided valuable experience. The HKMA will identify areas where the framework can be further enhanced. AIs' compliance with the capital adequacy and risk management standards will be monitored and the need for more guidance to help them upgrade their existing systems will be considered.

Capital adequacy assessment process

An important focus of the HKMA in 2008 will be to monitor AIs' progress in developing their CAAPs and evaluate their effectiveness. More guidance will be provided, if necessary, to assist the AIs in developing or improving their CAAPs to meet supervisory standards.

Review of the HKMA's work on banking stability

The HKMA has commissioned a review on how best it can discharge its responsibilities in promoting banking stability. The review takes into account recent and likely future developments in Hong Kong's banking system and the changing nature of the risks, such as the globalisation of finance and banking business and the increasing integration of the financial systems of Hong Kong and Mainland China.

The review, being conducted by a consultant who is an expert on banking supervision both in Hong Kong and around the world, coincides with the end of the programme of banking sector reforms initiated in 1999.

The current review aims to make recommendations on the focus and priorities of the HKMA's banking supervisory functions in the next five years or so. Based on a combination of paper and statistical research and interviews with key stakeholders in Hong Kong's banking system, the review is expected to be completed in the second quarter of 2008. The HKMA will study the consultant's recommendations before deciding on a policy response.

Review of liquidity regime

Market turmoil which emerged from the US sub-prime crisis in 2007 has clearly demonstrated the importance of liquidity risk management and supervision. The HKMA's supervisory framework on liquidity risk was last revised some years ago, which led to the issue of the SPM on "Liquidity Risk Management" in 2004. To ensure the supervisory framework remains appropriate to address recent market issues, the HKMA will review its current liquidity regime in 2008, focusing on the following aspects:

- use of stress-testing and scenario analysis (with emphasis on market-wide stress scenarios) for liquidity risk management
- complex financial instruments and their implications for liquidity risk management
- management of contingent liquidity risk (including risks from off-balance sheet vehicles)
- effectiveness of banks' contingency funding plans
- adequacy of liquidity reporting requirements.

Development of supervisory policies

Key policies and guidelines to be developed in 2008 include:

Counterparty credit risk management

This supervisory guideline will describe the approach to be adopted by the HKMA in supervising AIs' CCR and set out the main elements of an effective management system, having regard to applicable requirements under the Basel II framework, recommendations of the Counterparty Risk Management Policy Group, relevant supervisory requirements of other leading supervisors, and industry practices on CCR management.

Internal audit and compliance functions

The HKMA will provide guidance on its expectations for AIs' internal audit and compliance functions. Strong internal audit functions improve the effectiveness of risk management, control and governance. Adequate compliance acts as a "gatekeeper" to ensure AIs' conformity with rules, standards and procedures.

Consolidated supervision

The HKMA practises a group-wide approach to supervision of Hong Kong-incorporated AIs, where they form part of a financial group of companies, in line with the relevant standards contained in the *Basel Core Principles for Effective Banking Supervision*. The HKMA intends to prepare a supervisory guideline to outline its approach, requirements and practices to effect consolidated supervision of AIs.

Prevention of money laundering and terrorist financing

Hong Kong's AML and CFT supervisory framework will continue to be reviewed and updated in the light of developments, including the recommendations arising from the joint mutual evaluation by the FATF and the APG. The HKMA will undertake institution-specific and thematic examinations to ensure that AIs remain vigilant in combating the problem, and will continue to develop the Industry Working Group to engage AIs on relevant issues and proposals for practical guidelines for the industry.

Revised Basel Core Principles

The HKMA is in the process of conducting a self-assessment of its compliance with the revised *Basel Core Principles* released by the Basel Committee in October 2006, focusing on the new key updates such as those on risk management and consolidated supervision, with a view to identifying areas for further improvement.

Consumer protection

The HKMA will continue to promote industry self-regulation and improvement in the standards of banking practices through participation in the Code of Banking Practice Committee. It will assist the industry associations in completing the review of the *Code of Banking Practice* and monitor AIs' compliance with the Code through regular self-assessments and the handling of complaints about banking services.

Deposit Protection Scheme

The HKMA will continue to assist the Hong Kong Deposit Protection Board in operating the Deposit Protection Scheme. The Board will start implementing the various mechanisms developed in 2007 for monitoring Scheme members' compliance with the rules and guidelines of the Scheme. Enhancements will be made to the payout systems and processes in the light of the experience gained from the simulation tests and payout rehearsal. Further simulation tests and a payout rehearsal will be conducted to maintain and improve the Scheme's readiness. The Board will continue to promote the key features of the Scheme to the public through various promotional and educational channels.