

Banking Stability

The HKMA strengthened its supervisory activities in the aftermath of the global financial crisis; implemented new prudential measures to improve risk-management standards and practices for mortgage business; and introduced enhanced regulatory requirements to protect investors. Monitoring of Hong Kong banks' exposure to Eurozone sovereign debt indicates no significant risk to the soundness of banks in Hong Kong.

REVIEW OF 2010

Risk-based supervision

Following the global financial crisis, and the significant growth in loan portfolios and rapid expansion of the Mainland operations of authorized institutions (AIs), the HKMA has stepped up its monitoring and surveillance of AIs' asset quality, credit risk management, market risk and treasury activities and other areas of supervisory concern. As a result, 216 on-site examinations were conducted in 2010 compared with 142 in 2009. This was made possible by the release of supervisory staff resources previously redeployed to handle complaints on the sale of Lehman Brothers-related investment products by banks.

The HKMA conducted 49 risk-based examinations and 20 overseas examinations, of which 14 were related to AIs' Mainland operations. Areas of high supervisory priority were the subject of 74 focused thematic examinations covering asset quality; residential mortgage lending; trade financing activities; lending to small and medium-sized enterprises under the Government Loan Guarantee Scheme; compliance with the Representation Rules under the Deposit Protection Scheme and Guideline on Representation on Full Deposit Guarantee; and compliance with the regulatory requirements on renminbi business for personal and corporate customers.

The HKMA's specialist teams carried out 59 examinations of risk-management controls covering AIs' treasury and derivatives activities; sales of investment and insurance products and securities business; anti-money-laundering (AML) and counter-terrorist-financing (CFT) controls; Internet banking and technology risk management and practice; customer data protection and operational risk management; and business continuity planning. Reviews were also performed for selected AIs that have adopted the internal ratings-based (IRB) approach for credit risk or the internal models (IMM) approach for general market risk under Basel II to ensure their compliance with the relevant requirements and the effectiveness of their IT systems in supporting the implementation of the IRB approach.

During the year, 190 off-site reviews were conducted while 12 tripartite meetings among the HKMA, AIs and their external auditors were held. Other duties included regular analysis of prudential returns and the handling of non-compliance with guidelines or statutory requirements. Supervisory teams met the boards or members of the board-level committees of seven AIs. In addition, the Banking Supervision Review Committee considered five cases relating to the licensing of AIs in 2010. As part of the off-site surveillance, the HKMA also conducted a round of reviews on the liquidity strategy of selected retail banks and the effectiveness of their liquidity contingency arrangements prior to the expiry of the Full Deposit Guarantee. The reviews included cash-flow analysis and assessment of the banks' liquidity conditions under stress scenarios. Details of the operational supervisory work performed in 2010 are set out in Table 1.

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Table 1 Operational supervision

	2010	2009
1 On-site examinations	216	142
<i>Regular examinations</i>	69	32
– risk-based	49	29
– overseas	20	3
<i>Basel II – IRB and IMM reviews</i>	14	9
– IRB initial recognition assessment and follow-up examinations	10	6
– IRB IT aspects	3	–
– IMM internal model recognition assessment and review	1	3
<i>Credit risk management and asset quality</i>	49	26
<i>Market risk and treasury activities</i>	15	6
<i>Securities, investment and insurance products-related conduct examinations</i>	11*	17
<i>Compliance with the Deposit Protection Scheme Representation Rules and Guideline on Representation on Full Deposit Guarantee</i>	19**	19
<i>AML/CFT controls</i>	14	18
<i>IT, Internet banking and operational risk</i>	19	12
<i>Renminbi business</i>	6	3
2 Off-site reviews and prudential interviews	190	193
3 Tripartite meetings	12	16
4 Meetings with board of directors or board-level committees of AIs	7	6
5 Approval of applications to become controllers, directors, chief executives or alternate chief executives of AIs	241	269
6 Reports commissioned under section 59(2) of the Banking Ordinance	3	16
7 Cases considered by the Banking Supervision Review Committee	5	10
8 AIs that were subject to the exercise of powers under section 52 of the Banking Ordinance	1	3

* Apart from these 11 examinations by the specialist team, four regular examinations also covered this aspect.

** Included one examination on a non-Scheme member's compliance with the Guideline on Representation on Full Deposit Guarantee only.

Three reports were commissioned under section 59(2) of the Banking Ordinance to require three AIs to appoint external auditors to review internal controls and report their findings to the HKMA. One of the reports was related to a review of the processes and practices for handling Octopus cardholders' personal data. The other two reports were related to internal control systems for compilation of banking returns and liquidity risk management of an AI, and the AML/CFT controls of the other.

In 2010 no AI breached the requirements of the Banking Ordinance relating to capital adequacy. There was one breach of requirements under section 102 relating to liquidity ratios, two breaches of requirements under section 81 relating to large exposures, one under section 83 on connected lending, and three under section 85 on lending to AIs' employees. All of the breaches were assessed to be unintentional. They were rectified promptly by the relevant AIs and did not affect the interests of depositors.

Powers under section 52 of the Banking Ordinance

Only one AI, Melli Bank Plc, was subject to the exercise of powers under section 52 of the Banking Ordinance. The restrictions imposed by the Monetary Authority on 25 June 2008 under section 52(1)(A) of the Banking Ordinance on the affairs, business and property of the Hong Kong Branch of Melli Bank Plc remained in force during 2010. The HKMA continued to communicate regularly with the relevant authorities to monitor developments related to the branch and its Head Office in the United Kingdom, and to review the supervisory measures taken to protect the interests of the AI's depositors.

CAMEL rating review

Meetings of the CAMEL Approval Committee were held during the year to review and determine the composite CAMEL¹ rating of 192 AIs. The AIs were notified of the ratings and were given the opportunity to request a review, although none did so in 2010.

The CAMEL ratings of licensed banks on 20 October 2010 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 Scheme members in 2011 under the Deposit Protection Scheme.

¹ Comprising the **C**apital adequacy, **A**sset quality, **M**anagement, **E**arnings and **L**iquidity components.

Specialised supervisory work

Supervision of technology risk and operational risk

Internet banking, technology risk management and business continuity management

The use of Internet banking services continued to grow in 2010 with 63 AIs offering the facility in Hong Kong: the number of personal Internet banking accounts increased to 7.0 million (from 6.2 million in 2009), and there were 573,000 corporate Internet banking accounts (up from 477,000 in 2009). Fifty-three AIs, including all of the 37 that offer high-risk transactions (such as fund transfers to unregistered third-party accounts) through Internet banking, have implemented two-factor authentication and some 3.6 million customers have registered for this service.

The HKMA continued to work with various parties to promote public security awareness of Internet banking. This included organising a "Hong Kong Clean PC Day 2010" in conjunction with the Hong Kong Police Force, the Hong Kong Association of Banks (HKAB), the Office of the Government Chief Information Officer and the Hong Kong Computer Emergency Response Team Co-ordination Centre. The HKMA also worked with HKAB to launch an educational leaflet providing safety tips on the use of Automatic Teller Machines (ATMs).

The HKMA issued a circular on 22 June to remind AIs of the need for appropriate management capability and procedures to respond effectively to significant incidents. The circular set out the principles that AIs should follow in any public communications dealing with such incidents. In view of growing customer demand for the Internet banking account aggregation service, the HKMA also issued a circular on 16 July setting out the required risk-management controls that AIs should implement when introducing this service to their customers.

A Task Force on ATM Fraud Prevention, comprising representatives from HKAB, Joint Electronic Teller Services Limited (JETCO), the Hong Kong Police Force and the HKMA, was established in May 2010 to strengthen ATM security in Hong Kong. After detailed discussions, it was agreed that AIs should adopt chip-based technology

to strengthen ATM security. The HKMA is working with the banking industry on the details of implementation.

The HKMA conducted regular on-site examinations and off-site surveillance of AIs' controls over Internet banking, technology risk management and business continuity planning, and extended coverage of the supervisory control self-assessment process to 73 AIs (70 in 2009). These issues were also covered in the International Information Technology Supervisors Conference in which the HKMA is a regular participant.

Operational risk management

In 2010 the HKMA further strengthened its monitoring of AIs' operational risk and related risk management. The annual self-assessment exercise on operational risk management was extended to cover 76 AIs (52 in 2009), including all locally incorporated licensed banks and other selected AIs. The scope of the exercise was also expanded to collect more operational risk-related information to facilitate continued assessment and monitoring of individual AIs' risk profiles. The results of the self-assessments indicated the selected AIs were generally able to establish an operational risk management framework in line with the supervisory requirements. In addition, the operational risk management specialist team conducted on-site examinations on four AIs to review their policies and controls of operational risk.

Supervision of securities, insurance and Mandatory Provident Fund-related businesses

To increase regulatory focus on conduct issues and to step up the supervision of AIs' conduct of securities, insurance and Mandatory Provident Fund (MPF) intermediary activities, the HKMA centralised the supervisory resources dedicated to these activities into a specialised department with expanded manpower in April 2010.

Throughout the year, the HKMA co-operated closely with the Securities and Futures Commission (SFC), the Insurance Authority (IA) and the Mandatory Provident Fund Schemes Authority (MPFA) on the supervision of AIs' securities, insurance and MPF-related businesses. Regular contact was maintained through bilateral and multilateral meetings, and under the auspices of the Financial Stability Committee and the Council of Financial Regulators.

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The HKMA and SFC jointly instituted a mystery-shopper programme, engaging a service provider to assess intermediaries' compliance with the regulatory requirements on selling unlisted investment products, including structured deposits for the banking sector.

Since 2010, the HKMA has required all retail banks to submit quarterly surveys on the sale of investment products to retail banking customers to further strengthen off-site surveillance and risk-based supervision. The HKMA also continues to collect and analyse half-yearly returns on Als' securities and insurance activities. These returns provide a general overview and industry trends of the securities and insurance activities carried out by Als.

After detailed discussions with the banking industry, the HKMA issued a circular on 20 May requiring all Als to implement by 1 January 2011 a Pre-Investment Cooling-Off Period for the sale of unlisted derivative products to less sophisticated retail customers. This arrangement further enhances investor protection by reinforcing Als' procedures for giving customers sufficient time to consider their proposed investment. In addition, a number of circulars, including "Synthetic Exchange-Traded Funds and Related Products", "Selling of Renminbi Deposit, Investment and Insurance Products" and "Selling of Accumulators", were issued in 2010 to enhance and reiterate the regulatory requirements to protect the interests of investors and provide guidance to Als on the expected standards. The HKMA worked with the SFC and the banking industry on the implementation of the SFC's new regulatory measures for better investor protection.

Because of the simple product structure of plain vanilla renminbi bonds, which is easily understood by investors, the HKMA, in collaboration with the banking industry, launched a pilot scheme to streamline their selling arrangements.

In December 2010, the HKMA started discussions with the banking industry on a proposal to enhance the regulatory requirements for selling investment-linked assurance scheme (ILAS) products, in view of the features and risks (including the substantial long-term investment element) of these products. The HKMA also co-operated with the Government and the IA on the regulatory measures for the sale of eligible ILAS under the Capital Investment Entrant Scheme and on the proposal to establish an independent IA.

During the year, the HKMA conducted 11 thematic on-site examinations related to securities, insurance and investment products, covering the sales of ILAS and accumulators, the sponsor activities of initial public offerings, and compliance with the enhanced regulatory requirements for the selling of investment products. Four regular on-site examinations also covered this area.

The HKMA processed five applications for registration to become registered institutions (RIs) and five applications from RIs to engage in additional regulated activities. It also granted consent to 226 Executive Officers, who are responsible for supervising the securities activities of RIs, and conducted background checks on 9,297 individuals whose information was submitted by RIs for inclusion in the register maintained by the HKMA.

During the year, the HKMA worked with the Government and the MPFA in preparation for the implementation of the Employee Choice Arrangement and the proposal to enhance the regulatory regime of the MPF intermediaries.

Supervision of treasury activities

Apart from treasury examinations covering Als' control framework for managing risks arising from their treasury and derivatives activities, thematic examinations focusing on new-product approval processes were also conducted in 2010. Altogether 11 treasury examinations were conducted with a primary focus on assessing the Als' senior management oversight and market risk, as well as the counterparty credit risk (CCR) control framework for treasury and derivatives activities. Four product thematic examinations were also conducted during the year, mainly to assess Als' new product approval processes and their control framework. The results of both treasury and product thematic examinations indicated there was room for certain Als to strengthen their risk identification and management processes.

Credit risk management and asset quality

Prudential supervision of mortgage loans

With the exceptionally low interest rate environment and quantitative easing measures pursued by major economies, excess liquidity has pushed up asset prices in emerging markets, including Hong Kong. This has increased the risk of asset price bubbles in Hong Kong's property market. Since mortgage loans constitute a significant part of Als' loan portfolio, the HKMA issued two circulars to Als on 13 August and 19 November respectively introducing prudential measures to strengthen risk-management standards and practices for mortgage business. These measures included:

- (1) lowering the maximum loan-to-value ratios for residential properties with a value at or above \$12 million to 50%; residential properties with a value at or above \$8 million and below \$12 million to 60%; and non-owner-occupied residential properties, properties held by companies, and industrial and commercial properties, regardless of their values, to 50%; and

- (2) standardising the maximum debt servicing ratio (DSR) for mortgage applicants at 50%, instead of the former range of 50% to 60%. In addition, banks are required to stress-test mortgage applicants' ability to withstand mortgage rate rises of at least 200 basis points, and limit the stressed DSR to 60%.

Credit growth

The banking sector's total lending grew by 29% during the year amid the low interest rate environment. Strong growth was noted in property-related lending, trade financing and lending to the wholesale and retail sector. In addition, corporate borrowers with Mainland background have been borrowing in Hong Kong, resulting in a strong growth in non-bank China exposures. To improve monitoring of Als' credit risk management procedures, the HKMA held meetings with Chief Risk Officers or relevant business heads of Als with significant loan growth to understand their business strategies and risk-management procedures. The HKMA is also studying necessary changes to banking returns in order to obtain more detailed information for prudential analysis.

Global financial crisis

Following concerns over sovereign debt issued by some Eurozone countries, which led to renewed financial turbulence and increased risks to the global economic outlook, the HKMA stepped up its monitoring of Als' exposures to these countries. The information collected revealed that the local banks' exposures accounted for less than 1% of their total assets, and the sovereign debt crisis in Europe did not pose significant risks to the safety and soundness of Hong Kong's banks. Nevertheless, the HKMA will continue to monitor major developments in financial markets in both the US and Europe to assess any ongoing potential impact on the local banking system.

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Mainland-related business

Renminbi banking business

The HKMA issued a circular to Als on 11 February 2010 to clarify the supervisory principles and operational arrangements for renminbi business in Hong Kong. There are two guiding principles: first, that cross-border flows of renminbi funds into and out of the Mainland should comply with the Mainland's requirements and this will be verified by the relevant Mainland authorities and banks; secondly, Als may develop renminbi business based on the regulatory requirements and market conditions in Hong Kong provided it does not entail the flow of renminbi funds back to the Mainland. Following the expansion of the renminbi cross-border trade settlement pilot scheme and the amendment to the renminbi clearing agreement, the HKMA issued another circular in July setting out the scope of renminbi business for corporate customers and the associated supervisory measures. Among other things, Als are reminded to carry out adequate know-your-customer procedures and are required to observe a simplified risk-management limit by placing 25% of their total renminbi deposits with the Renminbi Clearing Bank or holding them in cash. In its supervision, the HKMA will also assess the renminbi funding structure of an AI engaged in renminbi business, particularly whether there is over-reliance on a single source of wholesale renminbi funds if the AI does not have a retail deposit base.

A further circular was issued to Als in December enhancing the cross-border trade settlement pilot scheme. Als are required to provide trade-related renminbi conversion services for their corporate customers only in relation to transactions due for settlement within the next three months or renminbi trade proceeds received in the past three months, if the resulting position is to be squared with the Renminbi Clearing Bank. Such renminbi trade position squaring should be conducted on a net basis. As a standing arrangement, Als can approach the HKMA, subject to certain conditions, for renminbi funding to support their cross-border trade settlement activities. Since the renminbi is not a freely convertible currency, the HKMA also requires all Als to maintain a net renminbi open position that does not go beyond 10% of the size of their renminbi balance sheet.

The HKMA continued to conduct on-site examinations during the year of Als' renminbi banking business. A revised prudential return was introduced in September to capture additional data arising from the substantial development in the business.

Tapping the Mainland market

Thirteen locally incorporated banks maintained business operations on the Mainland during the year, of which eight were operating through subsidiary banks incorporated on the Mainland. They continued to expand their branch network, maintaining over 300 Mainland branches or sub-branches, either directly or through subsidiary banks.

The industry's aggregate on-balance-sheet non-bank exposures to the Mainland amounted to the equivalent of HK\$1,410.6 billion at the end of 2010, or 10.1% of total assets. These included exposures of HK\$428.4 billion booked in Mainland subsidiaries of Hong Kong banks. Compared with 2009, the aggregate exposures grew by 63.7%. With the increasing importance of the Mainland market to Als, the HKMA continued to maintain close contacts with the China Banking Regulatory Commission (CBRC) to ensure effective cross-border supervisory co-operation and co-ordination. A Supplemental Memorandum of Understanding was signed with the CBRC during the year to enhance co-operation in banking crisis management. The HKMA also conducted on-site examinations of the Mainland operations of Hong Kong banks.

Prevention of money laundering and terrorist financing

The Anti-Money Laundering and Counter-Terrorist Financing (Financial Institutions) Bill, which seeks to improve Hong Kong's anti-money laundering regime, was gazetted on 29 October 2010. The Bill is expected to come into effect on 1 April 2012. It codifies customer-due-diligence and record-keeping requirements, providing for supervisory and criminal sanctions for contravention of the statutory requirements, and establishes a licensing regime for money service operators.

After consulting HKAB and The DTC Association (The Hong Kong Association of Restricted Licence Banks and Deposit-taking Companies), the HKMA issued a revised *Guideline on Prevention of Money Laundering and Supplement to the Guideline on Prevention of Money Laundering* in July to address issues raised in the Financial Action Task Force's 2008 Mutual Evaluation Report on Hong Kong and to better reflect international standards. To monitor AIs' compliance with the HKMA's *Guideline and Supplement*, the HKMA's AML/CFT specialist teams completed 13 Tier 2 on-site examinations and one thematic examination focusing on the AI's business relationship with overseas money services businesses.

Co-operation with overseas supervisors

During the year the HKMA participated in college-of-supervisors meetings organised by the home supervisors of 11 banking groups with significant operations in Hong Kong. Issues of common interest were discussed, including market trends, capital adequacy, stress-testing and liquidity risk management. As a member of the Cross-Border Crisis Management Working Group under the Financial Stability Board (FSB), the HKMA was involved in the Group's various meetings as well as the crisis management groups established for three banking groups to make advanced preparations for dealing with possible future financial and banking crises.

Bilateral meetings were held in Hong Kong and abroad with banking supervisory authorities from Australia, France, Japan, South Korea, Macau, Mainland, the Philippines, Singapore, Thailand, the UK and the US. There were also regular exchanges with overseas banking supervisory authorities on institution-specific issues and developments in financial markets.

The HKMA is also a member of the FSB Working Group on Data Gaps and Systemic Linkages and chairs one of the Group's work-streams responsible for addressing the legal and confidentiality constraints in any enhanced cross-border data-sharing arrangements. Enhanced data sharing, if effectively implemented, will help regulatory authorities better measure and understand the risks to the international system arising from increasingly integrated economies and financial markets and take early measures to mitigate the risk of contagion. The Working Group is expected to submit its report and recommendations to the FSB in early 2011.

Minibonds

As set out in the settlement agreement between the 16 distributing banks of Minibonds and the regulators under section 201 of the Securities and Futures Ordinance, the banks are required to engage independent firms to review their internal control systems and complaint-handling procedures relating to the sale of structured investment products. The exercise was completed during the year and, as part of its supervision, the HKMA has been monitoring the banks' progress in implementing the recommendations in the review reports. The HKMA is also following up on the work of the receivers appointed for the Minibonds in redeeming the underlying collateral.

BIS triennial FX survey

In April, the HKMA participated together with 52 other countries and financial centres in the Bank for International Settlements' Triennial Central Bank Survey of Foreign Exchange and Derivatives Market Activity. The result of the survey showed that Hong Kong remained the sixth largest foreign exchange centre (the seventh largest when over-the-counter (OTC) derivatives were included).

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Basel II

Enhancements to Basel II

The HKMA collaborated with the Financial Services and the Treasury Bureau and the Department of Justice in developing legislative amendments to the Banking (Capital) Rules (BCR) and the Banking (Disclosure) Rules (BDR) necessary for implementing the recommendations for proposed enhancements made in the Basel Committee on Banking Supervision papers *Revisions to the Basel II Market Risk Framework*, *Guidelines for Computing Capital for Incremental Risk in the Trading Book*, and *Enhancements to the Basel II Framework* issued in July 2009.

In June, the Basel Committee announced certain adjustments to the document *Revisions to the Basel II Market Risk Framework* and a new co-ordinated starting date for implementing the revisions of no later than 31 December 2011. The HKMA has informed the industry associations that it proposes to incorporate the market risk adjustments into the BCR, and follow the Basel Committee's revised timetable in implementing all enhancements to the credit risk and market risk capital frameworks. The opportunity has also been taken to clarify some existing provisions within the Rules and address some issues observed in the implementation of the Rules since their introduction in 2007.

As part of its July 2009 reform package, the Basel Committee issued supplemental Pillar 2 guidance to address major flaws in the governance and risk-management practices of financial institutions revealed by the global financial crisis. The guidance promotes firm-wide governance and risk management, and addresses a variety of risk-management issues relating to off-balance sheet and securitisation exposures, valuation of financial instruments, stress-testing and remuneration practices. In the light of this guidance, the HKMA updated and refined its Pillar 2 supervisory framework and guideline, which came into effect on 4 June 2010.

Implementation of advanced approaches

During the year the HKMA granted approval to three Als to adopt the IRB approach under the credit risk framework of the BCR, after assessing the robustness of the Als' internal rating systems and their compliance with the requirements set out in the Rules.

The HKMA conducted a benchmarking exercise in which the risk estimates used by different Als adopting the IRB approach to calculate their capital requirements for credit risk exposures with similar or identical risk characteristics were compared. The exercise found that the risk estimates used by the Als adopting the IRB approach were prudent on the whole, although a few outliers were observed. The HKMA has shared the results of the exercise with the participating Als adopting the IRB approach to enable them to make suitable improvements to their systems.

The HKMA conducted follow-up reviews of selected Als which had previously obtained the HKMA's approval to use the IRB approach for credit risk and the IMM approach for market risk. These follow-up reviews were designed to ascertain the Als' continuing compliance with the requirements for the use of these approaches. The results were in general satisfactory.

Supervisory review process

The Supervisory review process (SRP) provides the HKMA with a comprehensive framework for assessing locally incorporated Als' capital levels and risks, including non-credit risks such as interest rate risk in the banking book, liquidity risk, and reputation and strategic risks.

During the year the HKMA completed a round of SRP assessments on Hong Kong-incorporated AIs, including a review of their progress in establishing their own capital adequacy assessment processes (CAAPs). The SRP Approval Committee within the HKMA then reviewed the assessment results to consider the appropriate minimum capital adequacy ratios (CARs) for the AIs and whether there were other supervisory issues requiring attention. The AIs were notified of the results, and were given the opportunity to request a review of their minimum CAR, although none did so in 2010.

CAAP is an internal process whereby AIs assess whether their overall capital adequacy is commensurate with the risk profile of their operations and formulate a strategy for maintaining adequate capital levels. Since the implementation of Basel II, some AIs have already substantially established their CAAPs and have been regularly submitting the results to the HKMA for review. Notable progress has also been observed for some of the other AIs in that their policies and procedures for their CAAPs are now largely in place, although some of the methodologies for calculating the capital adequacy are still being finalised.

Basel III

On 16 December 2010 the Basel Committee issued the Basel III rules text, setting out the details of the new global regulatory standards on bank capital adequacy and liquidity designed to strengthen the resilience of the global banking system and reduce the probability and severity of future banking crises. This followed the release in December 2009 of two consultative papers *Strengthening the Resilience of the Banking Sector* and *International Framework for Liquidity Risk Measurement, Standards and Monitoring*, and a subsequent comprehensive quantitative impact study (QIS) on the consultation proposals. Basel III was endorsed by the Group of Twenty (G-20) leaders at their Seoul Summit in November and represents a significant contribution to the banking reform agenda set by the G-20 a year earlier at their Pittsburgh Summit.

Key aspects of Basel III

Strengthening the global capital framework

The quality of the regulatory capital base will be enhanced by:

- simplifying the categories of regulatory capital by removing the class of Tier 3 capital and creating a single class of Tier 2 capital
- introducing more stringent definitions of, and qualifying criteria for, Tier 1 and Tier 2 capital, including the removal of incentives to redeem and the

inclusion of a requirement that the contractual terms of non-common equity capital instruments must allow them to be written-off or converted to common shares in the event that a bank is unable to support itself in the private market (as set out in the Basel Committee's August 2010 consultative document, *Proposal to Ensure the Loss Absorbency of Regulatory Capital at the Point of Non-viability*)

- harmonising regulatory adjustments and providing that in most cases these should be deducted from common equity.

The minimum regulatory capital requirements in relation to risk-weighted assets will be increased with:

- the common equity requirement rising from 2% (before the application of regulatory adjustments) to 4.5% (after the application of stricter regulatory adjustments)
- Tier 1 capital requirement rising from 4% to 6%
- the total minimum capital requirement remaining unchanged at 8%.

The transparency of the capital base will be improved, with all elements of capital being required to be disclosed along with a detailed reconciliation to the reported accounts.

Basel III (continued)

Reducing pro-cyclicality

In "normal" times, outside of periods of financial and economic stress, banks should hold buffers of capital above the regulatory minimum capital requirement. For this purpose, Basel III establishes a capital conservation buffer of 2.5% made up of common equity (after the application of regulatory adjustments). Restraints will be imposed on earning distributions by a bank when its capital levels fall into the conservation range. The range of the capital conservation buffer will be adjusted when there are indications of excessive aggregate credit growth. This additional "countercyclical capital buffer" may range from 0% in normal times up to 2.5% during periods of excessive credit availability.

The countercyclical buffer aims to achieve the broader macro-prudential goal of protecting the banking sector from the build-up of systemic risk during periods of excessive aggregate credit growth. Both the countercyclical buffer and the capital conservation buffer are designed to be drawn down in periods of stress, thus enabling banks to absorb losses while continuing to lend and conduct their usual business. The HKMA is developing policies and procedures to implement this framework in Hong Kong.

The Basel Committee is also addressing pro-cyclicality by promoting more forward-looking provisioning through advocating a change in the accounting standards and working with the International Accounting Standards Board (IASB) towards an expected loss provisioning approach.

Supplementing the risk-based capital requirement with a leverage ratio

The Basel III proposals include the introduction of a simple leverage ratio to constrain the build-up of excessive leverage in the banking sector. The leverage ratio also provides additional safeguards against model risk and measurement error in the risk-based capital adequacy calculation.

Enhancing risk coverage

The capital requirements for CCR exposures from banks' derivatives, repo and securities financing activities will be strengthened. The minimum capital required to back these exposures will be raised through the imposition of capital charges for mark-to-market losses, the use of stressed inputs in the calculation, and the application of a multiplier in the calculation for exposures to large regulated financial institutions and unregulated financial institutions to reflect the higher degree of correlation between these exposures and the higher level of "interconnectedness" of such institutions. The Basel Committee is also strengthening risk-management standards for model validation, stress-testing, collateral management and margining requirements.

To address systemic risk and improve transparency in OTC derivatives markets, the Basel Committee is finalising a new framework for capitalising banks' exposures to central counterparties (CCPs), which includes incentives for banks to clear their OTC derivative transactions using CCPs and trade on exchanges where required or practicable. The details of this framework were issued in December 2010 for consultation.

Addressing systemic risk and interconnectedness

Systemically important banks should have loss-absorbing capacity beyond the minimum standards, and work continues at the Basel Committee and the FSB to develop a well-integrated approach to these institutions. This could include combinations of capital or liquidity surcharges, the use of contingent capital or bail-in debt, enhanced resolution regimes and more intensive supervision.

Basel III (continued)

Introducing a global liquidity standard

Basel III sets two minimum standards for funding liquidity and introduces a number of monitoring metrics for strengthening and promoting global consistency in liquidity risk supervision. The liquidity standards and monitoring metrics are intended to reinforce the application of the Basel Committee's *Principles for Sound Liquidity Risk Management and Supervision (Liquidity Sound Principles)* issued in September 2008. The two minimum standards are:

Liquidity coverage ratio

The liquidity coverage ratio (LCR) is designed to promote banks' short-term liquidity resilience by ensuring that they have a sufficient stock of high-quality liquid assets to meet contingent liquidity needs and survive for at least 30 days under a supervisor-defined scenario which combines an idiosyncratic and market-wide shock.

Net stable funding ratio

The net stable funding ratio (NSFR) complements the LCR by promoting banks' use of more stable and longer term funding sources to support their activities. This ratio compares an estimate of reliable funding sources to an estimate of required stable funding over a one-year time horizon under conditions of extended stress.

HKMA's participation in the shaping of Basel III

The HKMA supports Basel III in strengthening the resilience of the global banking system. It is a member of the Basel Committee and participates in several of the Committee's working groups (such as the Working Group on Liquidity and the Definition of Capital Sub-Group), which were instrumental in developing the Basel III proposals.

During the consultation period, the HKMA encouraged the industry associations to formulate co-ordinated responses to the Basel Committee. HKAB recognises the merit of improving the banking sector's ability to absorb financial and economic shocks. However, it

raised a number of specific concerns on the reform proposals, including the uncertain potential cumulative impact of the various constituent parts of the proposals on the banking sector in Hong Kong. Following discussions with the banking industry and others on the potential implications for Hong Kong and the East Asian region more generally, the HKMA submitted a paper to the Basel Committee in April 2010 contributing some further thoughts on the proposals.

A particular issue potentially affecting the implementation of the LCR in some jurisdictions (including Hong Kong) is the limited supply of eligible high-quality liquid assets denominated in the local currency to cover banks' liquidity needs. Sovereign or central bank debt is the main source of high-quality liquid assets for banks under the LCR and these jurisdictions do not have sufficient government debt in issue. As such, the HKMA contributed to the development of alternative options for these jurisdictions, and the proposed options are under review by the Basel Committee. The HKMA will continue to participate in developing proposals to address this issue.

Comprehensive quantitative impact study

Appropriate calibration of the Basel III reform package is pivotal to strengthening the resilience of the banking sector while fostering sustainable long-term economic growth. The Basel Committee undertook a comprehensive QIS during 2010 to assess how the Basel III standards would affect the capital and liquidity positions of banks. The QIS was complemented by other high-level assessments on the macroeconomic costs of the transition to Basel III and the long-term impact of the standards on the overall economy. In addition to participating in the Basel Committee's comprehensive QIS, the HKMA conducted its own local QIS on a broader sample of AIs to better assess the impact of the new standards on the local banking sector and to formulate its strategy for implementing the standards in Hong Kong.

Basel III (continued)

Impact of Basel III on Als

Hong Kong banks should have little difficulty in meeting the higher capital requirements as they are well capitalised and place more reliance than their peers in other jurisdictions on common equity to meet regulatory capital requirements. In addition, most of the Basel III regulatory adjustments are already required to be deducted from Tier 1 capital under Hong Kong's existing capital rules. Similarly the HKMA does not expect any major problem for banks in Hong Kong to comply with the new liquidity standards, although some may need to adjust their liquidity profiles or the composition of their pool of liquid assets.

Transitional arrangements for implementation

The Basel III framework will be phased in gradually to enable the banking sector to move to the higher capital and new liquidity standards while continuing to support economic activities through lending and other banking business. National implementation by Basel Committee member jurisdictions will begin on 1 January 2013 with full implementation by 1 January 2019.

The transitional arrangements include:

- phasing in minimum common equity and Tier 1 requirements between 2013 and 2015, in annual half-percentage-point increments
- phasing in the capital conservation buffer between 2016 and 2018, to reach a final level of 2.5% of risk-weighted assets on 1 January 2019
- phasing out capital instruments that no longer qualify as non-common equity Tier 1 or Tier 2 capital over a 10-year horizon from 2013 (instruments that do not meet the criteria for inclusion as common equity Tier 1 will be excluded from 1 January 2013)
- phasing out instruments with an incentive to redeem on their effective maturity date
- supervisory monitoring for the leverage ratio to commence on 1 January 2011; with a parallel-run period from 2013 to 2017. Disclosure of the leverage ratio (and its components) will start on 1 January 2015 and the ratio will migrate to a Pillar 1 treatment on 1 January 2018
- the observation period for LCR and NSFR to begin in 2011 to enable the impact of the liquidity standards to be monitored and any unintended consequences addressed, before formal implementation on 1 January 2015 and 1 January 2018 respectively.

Improving the supervisory policy framework

Revision of liquidity regime

During the year, the HKMA consulted the industry on a phased approach to strengthening the local liquidity regime to bring it into line with the latest international standards and address issues revealed from the recent crisis. As part of this process, the HKMA developed a new supervisory guideline "Sound Systems and Controls for Liquidity Risk Management" to implement the Basel Committee's 2008 *Liquidity Sound Principles*. Als are expected to upgrade their liquidity risk management process and build up their liquidity position, where necessary, to comply with the requirements of the guideline, based on a sound implementation plan to be agreed with the HKMA. The HKMA also assessed the adequacy of its liquidity risk supervisory framework against the supervisory principles set out in the *Liquidity Sound Principles*. While the framework largely reflects the *Principles*, an action plan has been devised to strengthen areas where improvements can be made.

Following finalisation of the Basel III liquidity standards and monitoring tools in December 2010, the HKMA will consider the most appropriate approach for implementing them in Hong Kong and will begin enhancing the liquidity reporting framework to facilitate supervisory monitoring of Als' liquidity risk profiles and positions.

A benchmark review of industry practice in liquidity risk management and stress-testing was conducted in the fourth quarter of 2010, covering over 20 selected Als. The review was aimed at identifying good practices to share with the industry.

Compensation practices

In March 2010, the HKMA finalised its "Guideline on a Sound Remuneration System", after addressing a variety of comments received from the industry and other interested parties. The Guideline was designed to reflect the FSB's *Principles for Sound Compensation Practices* and accompanying *Implementation Standards (Principles and Standards)*. It provides guidance for the development and operation of Als' remuneration systems to ensure they are consistent with, and

promote, effective risk management. All Als were expected to bring their remuneration systems into line with the Guideline from the end of 2010.

In monitoring this progress, the HKMA provided Als in July with a template for conducting a self-assessment on their level of compliance. The results indicated the major locally incorporated Als already broadly complied with the Guideline and the majority of foreign bank branches were close to being fully compliant.

Internationally, the FSB conducted a peer review on the implementation of the *Principles and Standards* by its member jurisdictions in December 2009. The review report, published on 30 March 2010, indicated there were differences in the approach and pace of implementation, and that a sustained and co-operative effort would be required from supervisors and financial institutions to fully implement the *Principles and Standards* by the end of 2010. A follow-up review will be undertaken by the FSB in the second quarter of 2011 to assess the effectiveness of measures put in place in individual jurisdictions and the progress in industry compliance with the *Principles and Standards* and with respective national rules. The HKMA will conduct its own thematic examinations in the first quarter of 2011 to ensure Als' proper implementation of the Guideline and continue to monitor Als' progress as recommended by the FSB. The HKMA will also take into account any potential risks that may arise from Als' remuneration systems as part of its risk-based supervisory process.

Stress-testing

To further enhance Als' stress-testing frameworks, the HKMA updated its supervisory guidance incorporating the *Principles for Sound Stress Testing Practices and Supervision* issued by the Basel Committee in May 2009. The guidance includes recommendations and observations made by other international organisations and industry groups to address stress-testing deficiencies revealed by the global financial crisis. The draft revised guidance was issued for industry consultation in February 2011.

Improving the supervisory policy framework (continued)

General risk management controls

The existing guideline "General Risk Management Controls" was revised to reflect changes in international standards and practices in response to the crisis. The changes mainly relate to issues that have firm-wide implications, including, for example, the lack of a comprehensive approach to managing firm-wide risks; ineffective risk management oversight by the Board of Directors and senior management for risk identification, analysis and monitoring; and inadequate information and system infrastructure to support the broad management of financial risks. The revised guideline was formally issued on 31 December 2010, after addressing industry comments.

Prudent valuation

The Basel Committee issued a paper on *Supervisory Guidance for Assessing Banks' Financial Instrument Fair Value Practices* in April 2009. This emphasised

the critical importance of robust risk-management and control processes around the measurement of fair values and their reliability, including the specific assessment of valuation uncertainty and the making of valuation adjustments to reflect appropriate risks. The accounting and auditing standard-setters also issued guidance to address the valuation challenges and risks faced by financial institutions when markets were no longer active during the global financial crisis. In the light of these developments, the HKMA reviewed the module "Use of the Fair Value Option for Financial Instruments" in its Supervisory Policy Manual (SPM), and issued an enhanced version "Guidance on Financial Instrument Fair Value Practices" for consultation with the industry associations and the Hong Kong Institute of Certified Public Accountants (HKICPA) in March 2010. The final text is expected to be released in the first half of 2011 after addressing the comments received from the consultation.

Accounting and disclosure

Provisioning standards

In 2010 the IASB continued its review of the impairment rules for financial instruments, as part of a more comprehensive review of international accounting standards *Financial Instruments: Recognition and Measurement*. The review aims to address concerns about pro-cyclicality under the current incurred-loss provisioning model, which does not permit anticipation of possible or probable future loan losses, resulting in loan-loss provisioning levels varying significantly through the economic cycle. The IASB issued an Exposure Draft on the amortised cost measurement and impairment of financial instruments in November 2009, which proposed a move from the incurred-loss model to an expected cash-flow approach. While strongly supportive of this initiative, the Basel Committee made some recommendations to

improve the operational feasibility, including practical expedients for the easier recognition of expected credit losses.

The IASB is expected to publish a refined proposal in the first quarter of 2011 for public comment. The HKMA will monitor developments on this accounting standard and will assess the levels of the regulatory reserve required to be maintained by Als.² In 2010 Hong Kong experienced rapid loan growth amid relatively benign economic conditions and Als' estimates of loan impairment during this period using the incurred-loss approach are likely to be much lower than the inherent credit losses that could eventually materialise during any subsequent economic downturn. Therefore, the HKMA will continue to require the maintenance of an adequate regulatory reserve by Als in addition to their accounting provisions to cater for expected, but not yet incurred future losses.

² The regulatory reserve is a non-distributable reserve, earmarked against retained earnings, which was introduced in 2005 to reduce the impact of changes in accounting standards on provisioning levels.

Dialogue with the HKICPA Banking Expert Panel

The HKMA has discussed a variety of accounting issues and key supervisory policy developments as part of its regular bilateral meetings with the HKICPA Banking Expert Panel. This process is critical to gaining a mutual understanding of each party's main concerns on the development of global accounting standards and their implications for Als' financial reporting and the HKMA's regulatory framework. HKAB members have also helped the HKMA assess the implications by sharing their concerns.

Thematic review on risk disclosures

Recognising the importance to market confidence of reliable valuation and timely disclosure of the risks that are most relevant to prevailing market conditions, the April 2008 FSB Report on *Enhancing Market and Institutional Resilience* proposed improved disclosure of banks' exposures to securitised and structured products. The FSB initiated a peer review in June 2010 to consider the implementation of these recommendations by supervisors and banks in its member jurisdictions. Hong Kong's response was co-ordinated among the HKMA, the SFC and the IA. The HKMA is also participating as a member of the review team, which intends to finalise its report by the end of the first quarter of 2011.

Macro-prudential surveillance

The HKMA has strengthened its internal communications on macro-prudential issues through a cross-departmental working group, with representatives from the Banking, Research and other relevant departments. This provides a platform for discussion of evolving market trends and financial product developments to identify any warning signals of emerging systemic risk.

A division tasked with increased focus and responsibility for macro-prudential surveillance has been closely monitoring the development of new financial products by analysing the associated risks and fund flow implications for banks and investors. The division has also improved

its data analysis techniques at a macro level to better understand risk-transfer mechanisms and the fund flow patterns within the banking sector, across different areas and across borders.

A review of the HKMA's supervisory data requirements and data analysis techniques was initiated in 2010 as a result of the global financial crisis, evolving regulatory requirements and financial conditions. The review should help further improve the quality of supervisory analysis and ensure compliance with new international regulatory requirements.

Consumer protection

Code of Banking Practice

In the industry's self-assessment covering the period from June 2008 to December 2009, all Als reported full compliance or almost full compliance³, with the Code of Banking Practice.

The HKMA strengthened its monitoring of Als' compliance with the Code of Banking Practice by revising the reporting template for the annual self-assessments to obtain more detailed information, and introducing an exception reporting requirement and a "mystery shopper exercise". The exercise was introduced as a proactive approach to assess compliance from the consumers' perspective.

During the year, the HKMA studied the latest developments and trends in major credit card markets, including the US and the UK. It was concluded that some of the enhancement measures should be introduced in Hong Kong to ensure customers are treated fairly. After detailed discussions between the HKMA and the industry, HKAB announced in January 2011 the implementation of 11 such measures before the end of March 2011, covering practices in relation to interest rates, fees and charges, increase in credit limit, disclosure, billing, underage customers and responsible lending. The implementation of other enhancement measures would be further studied.

³ With five or fewer instances of non-compliance.

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Improving transparency of credit card instalment payment plans

The HKMA issued a circular to all AIs in August setting out the requirements they should follow when marketing through third parties instalment payment plans (IPPs) involving pre-payment for goods or services. The action followed several cases where consumers, who had pre-paid for services using credit card IPPs, suffered losses because merchants went out of business. Under the new arrangement, AIs are required to ensure that consumers are given the necessary information in an easily readable form to ensure they are fully aware of the nature of the IPPs and their obligations when entering into such agreements.

Data privacy issues

Following public concerns over data privacy raised by the Octopus incident and an Administrative Appeals Board (AAB) decision involving an AI, the HKMA issued three circulars in August, September and October to remind AIs of the need to comply with the latest recommendations and guidance issued by the Privacy Commissioner. AIs are also required to review their practices on handling customers' personal data taking into account the Privacy Commissioner's reports and guidance on the collection and use of personal data in direct marketing, as well as the AAB decision.

Proposed establishment of an Investor Education Council and a Financial Dispute Resolution Centre

During 2010, the HKMA provided advice to the proposed establishment of an Investor Education Council and a Financial Dispute Resolution Centre and participated in a working group set up by the Government to discuss implementation issues relating to the latter.

Credit data sharing

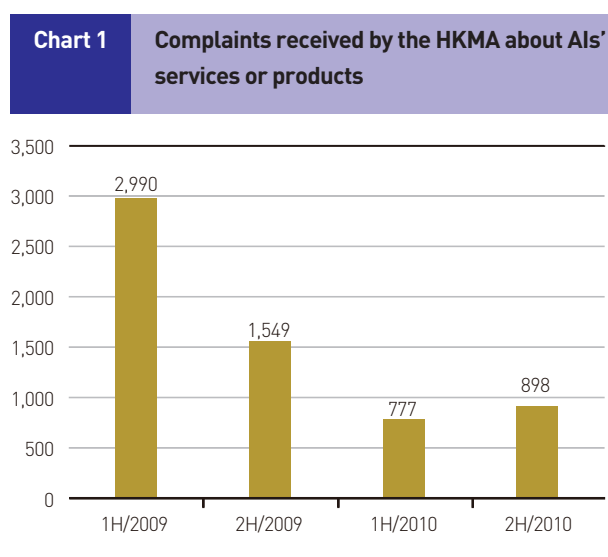
At the end of 2010, 116 AIs were sharing commercial credit data through the Commercial Credit Reference Agency (CCRA). The scheme contained the credit data of more than 112,900 business enterprises, about 18% of which

were sole proprietorships and partnerships. The continued development of the CCRA has helped to strengthen the credit risk management capacity of AIs and improve the access to credit by small and medium-sized enterprises.

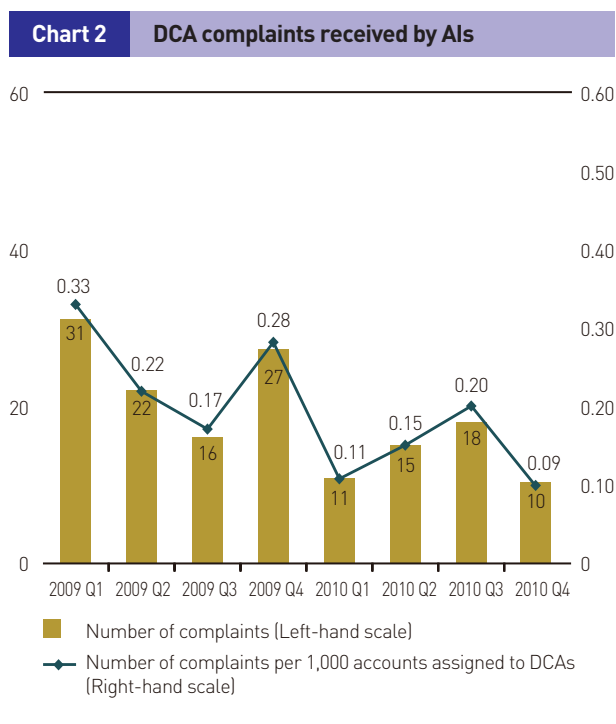
During the year, the HKMA worked with the industry and the Office of the Privacy Commissioner for Personal Data on a proposal to expand consumer credit data sharing arrangements to include positive mortgage data. Such a move among lenders will improve credit risk management by allowing lenders to have access to limited information on whether applicants for credit have outstanding property mortgages. The proposal will enhance the overall stability of Hong Kong's banking system. If adopted, the proposal will require an amendment to the Code of Practice on Consumer Credit Data issued by the Privacy Commissioner. On 5 January 2011, the Commissioner issued a document on sharing mortgage data for credit assessment for public consultation until 8 February 2011.

Customer complaints

The HKMA received 1,675 complaints about services provided, or products sold, by AIs in 2010, compared with 4,539 a year earlier (Chart 1). The fall reflected a reduction in the number of complaints received for investment products sold by AIs.



Complaints received by Als against their debt collection agents (DCAs) also decreased to 54 from 96 in 2009 (Chart 2). The HKMA will continue to review the situation to ensure Als remain vigilant in monitoring the performance of the DCAs that they use.



Enforcement

The HKMA has a shared responsibility with the SFC for enforcing the rules and regulations on RIs and their Executive Officers and Relevant Individuals in the conduct of regulated activities. In April, the HKMA strengthened its enforcement arm by forming a stand-alone department to take over the responsibility for securities enforcement and complaint-handling functions.

Lehman-related investigation

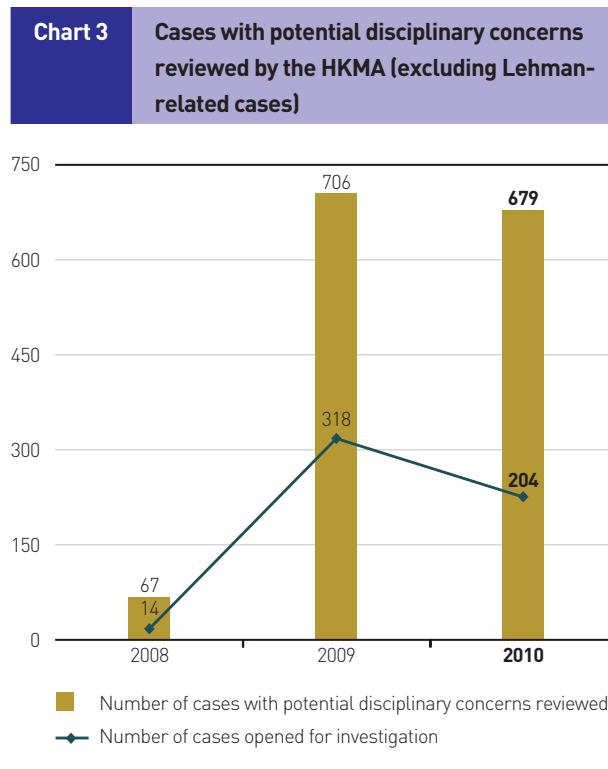
By the end of March, investigations had been completed in over 99% of Lehman-related complaints. And, by the end of 2010, over 77% of the complaints had been resolved by the settlement agreements under section 201 of the Securities and Futures Ordinance (SFO) (14,369 cases) or through the banks' enhanced complaint-handling procedures (2,551 cases).

The SFC and the HKMA reached a settlement agreement with a bank during the year in relation to its distribution of Lehman-related credit-linked notes, enabling more than 2,100 eligible customers to recover their principal plus interest.

Ninety-six remaining Lehman-related complaints were being investigated by the HKMA at the end of 2010. Working in close collaboration with the SFC, the disciplinary proceedings of 1,542 cases were also being processed.

Non-Lehman-related investigation

During the year, the HKMA reviewed 679 cases involving products not related to Lehman. Among them, 204 cases were opened for investigation (Chart 3). Investigations of 105 cases were completed by the end of 2010. As a result, the HKMA commenced its own disciplinary proceedings, or recommended the SFC to commence disciplinary proceedings, in five cases. On the basis of the HKMA's recommendations, the SFC banned two former Relevant Individuals from re-entering the industry for a specified period by exercising its sanctioning power under the SFO.



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Deposit Protection Scheme

The enhanced Deposit Protection Scheme (DPS) providing a higher protection limit of HK\$500,000 came into operation on 1 January 2011. The new DPS ensures that bank deposits continue to be protected up to this level following the expiry of the Government's Full Deposit Guarantee on 31 December 2010. The Full Deposit Guarantee was a contingency measure introduced at the onset of the global financial crisis in late 2008 to reinforce confidence in Hong Kong's banking system.

To ensure the enhancements to the DPS would take effect at the beginning of 2011, the Hong Kong Deposit Protection Board, with the assistance of the HKMA, completed the necessary legislative amendments in June. In addition to the new HK\$500,000 limit per depositor per bank, the coverage of the DPS was expanded to include deposits pledged as security for banking services. Measures were also introduced to improve payout efficiency. Requirements for Scheme members to make enhanced representations for their DPS membership and the protection status of their financial products also took effect at the same time.

To raise public awareness of the changes, a comprehensive multi-media campaign was launched in the second half of 2010. Close collaboration with banks was maintained to ensure timely adjustments were made to their systems and business flows to prepare for the transition. The Board also worked with the HKMA to remind AIs to make proper representations on the expiry of the Full Deposit Guarantee and its potential impact on their customers.

During the past two years, the HKMA had completed 37 compliance examinations relating to the representation requirements, with results showing Scheme members had generally established proper policies and procedures to ensure compliance with the requirements.

Oversight of clearing and settlement systems

Oversight of designated systems

The Clearing and Settlement Systems Ordinance (CSSO) empowers the Monetary Authority to designate and oversee clearing and settlement systems that are material to the monetary or financial stability of Hong Kong, or to the functioning of Hong Kong as an international financial

centre. The purpose of the CSSO is to promote the general safety and efficiency of the designated systems: the Central Moneymarkets Unit (CMU), Hong Kong dollar Clearing House Automated Transfer System (CHATS), US dollar CHATS, Euro CHATS, Renminbi CHATS and the Continuous Linked Settlement (CLS) System. Except for the CLS System, the HKMA oversees the designated systems through off-site reviews, continuous monitoring, on-site examinations and meetings with management. Oversight of the CLS System is described in the next section.

All designated systems continued to comply with the safety and efficiency requirements under the CSSO in 2010. In July, all local designated systems successfully migrated to the SWIFTNet infrastructure.

In addition to complying with CSSO requirements, the systems are encouraged to comply with internationally recognised standards for payment and settlement. During the year, the HKMA assessed the Hong Kong dollar CHATS against the *Core Principles for Systemically Important Payment Systems* issued by the Bank for International Settlements (BIS). The assessment report, which was published on the HKMA website, concluded the Hong Kong dollar CHATS complied with all the ten *Core Principles*.

Co-operative oversight arrangements

The CLS System is operated by CLS Bank, which is primarily regulated by its home supervisor, the US Federal Reserve. The HKMA, through the CLS Oversight Committee, participates in the international co-operative oversight of the CLS System.

The HKMA also co-operates with other central banks in the oversight of foreign currency payment systems in Hong Kong. In particular, the HKMA held bilateral meetings with officials from the European Central Bank and the People's Bank of China to discuss matters concerning the Euro CHATS and Renminbi CHATS during the year. Co-operative oversight arrangements are also maintained with other central banks for payment-versus-payment (PvP) links established between payment and settlement systems in Hong Kong and those in other jurisdictions. Such arrangements are in place for the US dollar/Malaysian Ringgit PvP link and the US dollar/Indonesian Rupiah PvP link.

Independent tribunal and committee

An independent Clearing and Settlement Systems Appeals Tribunal was established in 2004 to hear appeals by any party aggrieved by a decision of the Monetary Authority on designation and related matters under the CSSO. There has been no appeal since the establishment of the Tribunal.

An independent Process Review Committee reviews processes and procedures adopted by the HKMA in applying standards set under the CSSO to systems in which the HKMA has a legal or beneficial interest. The Committee evaluates the designated systems' compliance with the oversight standards and assesses whether the HKMA has applied the same set of procedures to all designated systems. The Committee held two meetings in 2010 and reviewed four regular reports and 22 accompanying oversight activities management reports of the designated systems, and concluded it was not aware of any case where the HKMA had not duly followed the internal operational procedures, or where the HKMA had not been procedurally fair in carrying out its oversight activities. Under its terms of reference, the Committee submitted its annual report to the Financial Secretary and published the report on the HKMA website.

Informal oversight of retail payment systems

Compared with large-value interbank payment systems, the retail payment systems generally carry minimal systemic risks and, at this stage, the HKMA considers they are not systemically significant enough to be designated under the CSSO. However, the HKMA encourages the retail payment industry to adopt a self-regulatory approach by issuing codes of practice to promote safety and efficiency.

The HKMA is responsible for monitoring the compliance of Octopus Cards Limited (OCL) with the Code of Practice for Multi-purpose Stored Value Card Operation issued by OCL and endorsed by the HKMA in 2005. In 2010 OCL completed its fifth annual self-assessment against the Code and reported its full compliance.

The Code of Practice for Payment Card Scheme Operators, issued by eight credit and debit card scheme operators and endorsed by the HKMA in 2006, sets out the principles covering operational reliability, data and network security, and the efficiency and transparency of payment card operations in Hong Kong. The HKMA monitors the

operators' compliance with the Code and all operators are required to perform an annual self-assessment and report to the HKMA any incident which may have material and adverse impact on Hong Kong cardholders. In the third annual self-assessment report covering 2009, the eight card scheme operators reported full compliance with the Code. Since June 2010, the HKMA has published quarterly aggregate payment card data collected from the card operators to promote transparency of the payment card industry.

Licensing

At the end of 2010, Hong Kong had 146 licensed banks, 21 restricted licence banks, 26 deposit-taking companies and 16 approved money brokers. During the year the HKMA granted banking licences to four foreign banks. Three licensed banks, five restricted licence banks and two deposit-taking companies revoked their authorization during the year.

International co-operation

The HKMA continues its participation in various international and regional forums for banking supervisors. The HKMA is currently a member of both the Basel Committee and its governing body, the Group of Central Bank Governors and Heads of Supervision. The HKMA also participates in various Basel Committee initiatives through its membership of the Committee's working groups, including the Liquidity Working Group, the Definition of Capital Sub-Group and the Standards Implementation Group. The HKMA is a member of the FSB's Standing Committees on Supervisory and Regulatory Cooperation and Assessment of Vulnerabilities. Regionally, the HKMA is a member of the Executives' Meeting of East Asia-Pacific Central Banks (EMEAP) and completed its term as chairman of the EMEAP Working Group on Banking Supervision (WGBS) in July. The HKMA remains the leader of the EMEAP WGBS Interest Group on Liquidity. The HKMA is also a member of the South East Asia, New Zealand and Australia Forum of Banking Supervisors.

On payment systems oversight, the HKMA participates regularly in meetings of the committees and working groups under the BIS and EMEAP. The HKMA is a member of the joint working group under the BIS Committee on Payment and Settlement Systems and International Organization of Securities Commissions (IOSCO) and

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participated in the review of the existing core standards for financial market infrastructures (large-value payment systems, securities settlement systems and central counterparties). It also contributes in areas related to operational risk and governance.

PLANS FOR 2011 AND BEYOND

Supervisory focus

Credit risk management and asset quality

Prudential supervision of mortgage loans

The HKMA will continue to monitor closely developments in the property and mortgage markets, and may introduce appropriate prudential measures for mortgage loans to safeguard banking stability. In the first half of 2011, the HKMA will conduct thematic on-site examinations to ensure Als' compliance with the new prudential measures for mortgage loans specified in its circulars.

Credit growth

Supervisors need to address difficulties arising from the pro-cyclicality of the existing supervisory regime; for example, risk factors such as delinquency and default rates are likely to decline when credit growth and asset prices are on the rise, rendering the introduction of more forward-looking supervisory requirements difficult. To guard against this, the HKMA will devote more regulatory resources in 2011 to tackle the risks arising from the significant loan growth in 2010. In addition to the supervisory focus on property mortgage lending, the HKMA has scheduled a round of on-site examinations to assess Als' compliance with prudent underwriting standards. Macro-prudential surveillance will continue to keep track of the situation and facilitate forward-looking prudential analysis. Contacts with Als' senior management teams will be strengthened to ensure they take timely and appropriate measures to address the possible build-up of systemic risks.

Supervision of technology risk and operational risk

Internet banking, technology risk management and business continuity management

A round of thematic examinations on Als' controls over the development of critical business systems running

on end-user computer workstations is planned for 2011. Examinations are also planned to cover Als' controls over their processes for managing IT problems and changes.

Efforts to strengthen ATM security will continue in conjunction with the banking industry, in particular on the introduction of ATM chip-based technology as soon as practicable. In view of the growing popularity of mobile devices with web-browsing capability, the HKMA is monitoring these developments and, where applicable, will strengthen the relevant regulatory requirements for mobile and Internet banking.

Operational risk management

Through on-site examinations and off-site reviews, the HKMA's operational risk management specialist team will identify and address Als emerging operational risks. To facilitate this, the existing operational risk profiling system, under which information gathered by the HKMA from the annual self-assessment exercise is analysed, will be further enhanced.

Supervision of securities, insurance and MPF-related business

The HKMA will continue to co-operate with the SFC and the banking industry on implementation of the SFC's new investor protection measures. The HKMA is also working with the banking industry on improving the regulatory requirements for the sale of investment and insurance products and on the possible streamlining of the selling process for relatively simple investment products.

With additional resources allocated, on-site examinations focusing on Als' sale of investment and insurance products will be ramped up in 2011. The HKMA also plans to launch another mystery shopper exercise on the sale of unlisted investment and insurance products.

The HKMA will continue its co-operation with the Government and other financial regulators on improving the regulatory regimes for insurance and MPF-related intermediary activities in Hong Kong.

Supervision of treasury activities

On-site examinations of Als' treasury and derivatives activities will be conducted, and resources will be strengthened to include stress-testing and liquidity

management as part of the HKMA's efforts to enhance the supervision of enterprise-wide stress-testing and liquidity management.

Mainland-related business

With the rapid growth in Mainland operations of Hong Kong banks, the HKMA will strengthen its surveillance to ensure that any associated risks will be assessed thoroughly and well-managed in the supervisory process. This will involve enhanced data collection through regular surveys for off-site review and increased on-site examinations of the Mainland operations. The HKMA will also liaise closely with the CBRC to ensure effective home-host supervisory co-operation.

As the increase in Als' non-bank exposures to Mainland China accounted for a significant proportion of the growth in credit in 2010, the need to maintain robust credit risk management will be emphasised in the HKMA's on-site examinations. Consideration will also be given to collecting more prudential data for analytical purposes. In addition, with the substantial development of renminbi banking business during 2010, supervisory monitoring on the way Als manage the risks arising from this line of business will be enhanced.

Remuneration practices

The HKMA expects to complete the on-site examinations of Als' compliance with the "Guideline on a Sound Remuneration System" during the first quarter of 2011. Depending on the examination findings, the HKMA may, where appropriate, develop a set of best practices for sharing with the relevant institutions. The findings, together with the results of the Als' self-assessment exercise, will form part of the HKMA's response to the FSB's follow-up peer review on remuneration to be conducted in the second quarter of 2011.

Prevention of money laundering and terrorist financing

The HKMA will assist the Government in the legislative process in relation to the Anti-Money Laundering and Counter-Terrorist Financing (Financial Institutions) Bill, and participate in drafting a guideline to support the implementation of the new regime. The HKMA will undertake institution-specific and thematic examinations

to ensure Als remain vigilant against money laundering and terrorist financing.

International co-operation

The recent global financial crisis has underscored the importance of effective cross-border co-operation among regulators. The HKMA is committed to playing its part in various colleges of supervisors and crisis management groups. Participation in international financial forums will be a priority in keeping abreast of developments and ensuring Hong Kong's views and concerns are properly reflected at these forums. This will facilitate implementation of initiatives to improve the supervision of banks that are regarded as Systemically Important Financial Institutions.

In 2011, the FSB proposes to conduct peer reviews on the FSB's Principles and Implementation Standards on compensation and new capital and liquidity rules as well as policy measures regarding global systemically important financial institutions and deposit insurance. The HKMA will participate in these reviews.

Basel II

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

In order to implement in Hong Kong the Basel Committee's July 2009 enhancements to the Basel II framework, the HKMA aims to conduct the required statutory consultation on the proposed amendments to the BCR and BDR in June 2011, pursuant to sections 98A and 60A of the Banking Ordinance. The final amended Rules are expected to be submitted to the Legislative Council in October 2011 for negative vetting and to take effect on 1 January 2012.

The regulatory return on capital adequacy and the relevant modules of the SPM will need to be amended to reflect the revisions to the BCR and BDR. This will be pursued in the first half of 2011 in consultation with the industry.

Implementation of advanced approaches

Market risk

The HKMA will conduct reviews of Als currently using the IMM approach for market risk to ascertain their

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compliance with the additional requirements (for example, calculation of stressed value-at-risk) under the revised market risk framework. Subject to Als' compliance with the requirements set out in the amended BCR, the HKMA will grant approval for these Als to continue using the IMM approach under the revised framework.

Operational risk

Locally incorporated Als in Hong Kong currently adopt either the Basic Indicator Approach or the Standardised Approach for measuring their capital charge for operational risk under the BCR. However, to further enhance their systems, some Als are planning to progressively adopt risk-management practices aligning with the Basel Committee's advanced measurement approaches for operational risk. To encourage Als to adopt more robust systems for managing operational risk, the HKMA will monitor the development of these practices and devise a policy framework for the introduction of the Basel Committee's advanced measurement approaches, where appropriate.

Capital Adequacy Assessment Process

Hong Kong-incorporated Als have made significant progress in developing their CAAP capability. In addition to its regular SRP reviews, in which individual Als' progress in establishing their CAAPs is considered, the HKMA plans to conduct a round of more focused thematic examinations to assess Als' compliance with the CAAP supervisory standards having regard to their risk profile and the level of sophistication of their operations. Based on the examination results, the HKMA will identify best practices and potential issues and, where necessary, provide further guidance to assist Als in enhancing and developing their existing systems to implement the CAAP standards.

Revision of liquidity supervisory framework

After the release of the new supervisory guideline "Sound Systems and Controls for Liquidity Risk Management", the HKMA's focus will be on monitoring progress and working with the industry towards compliance with the enhanced risk management standards in the guideline. Specific reviews and thematic on-site examinations will be conducted on individual Als to assess their compliance, and supplementary guidance will be issued where appropriate, taking into account implementation experience and further international developments.

Preparatory work on enhancing other areas of the liquidity supervisory framework, including the minimum liquidity standards and the reporting framework, will continue. The HKMA will in due course issue its proposals on these areas for industry consultation.

Basel III

The HKMA will devise a programme and timeline for the implementation of the Basel III standards in Hong Kong, having regard to the phase-in arrangements announced by the Basel Committee. The programme is expected to be released for initial consultation in the first half of 2011.

Given both the novelty and complexity of the proposed liquidity framework and the likelihood that the standards will be subject to change during the Basel Committee's observation period, the HKMA will consider the optimal approach, with the appropriate degree of flexibility, for implementing the framework.

Legislative amendments to the Banking Ordinance, BCR and BDR will be required to implement Basel III in Hong Kong. The HKMA aims to complete the legislative amendment process in the 2011 – 2012 legislative session to allow sufficient time for the development of supervisory guidelines and for Als to introduce necessary system improvements.

Consultation on capitalisation of bank exposures to central counterparties

On 20 December 2010, the Basel Committee issued a consultative paper *Capitalisation of Bank Exposures to Central Counterparties*, setting out proposals for the capital treatment of banks' exposures to central counterparties (CCPs), including both trade and default fund exposures. The proposals aim to ensure that while providing incentives for banks to increase the use of CCPs to clear OTC derivatives trades, the risk arising from banks' exposures to CCPs is adequately capitalised. The consultation ended in February 2011 and the Basel Committee is in the process of refining the standards with a view to finalising them for implementation internationally by January 2013 as part of the enhanced capital treatment for banks' CCR exposures. The HKMA will work with the industry to adopt these standards in Hong Kong.

Transitional arrangements

As the leverage ratio and liquidity standards are newly developed, the Basel Committee has provided as part of the transitional arrangements an observation period to monitor their operation and effects before they are confirmed and formally implemented. The Committee will put in place robust data reporting and assessment processes to monitor the effect of the new leverage ratio

and liquidity standards and to facilitate consideration, during the observation periods, of whether further adjustments to their design and calibration are required. The HKMA will monitor the development of the transitional reporting arrangements and consider the scope and approach for implementing those arrangements in Hong Kong. This may entail additional QIS-like reporting exercises or more formal regulatory reporting.

Development of supervisory policy

Competence and ethical behaviour

The past few years have seen a period of rapid innovation in Als' business, product lines and markets. Coupled with this has been the need to adopt more advanced approaches to the measurement and management of the risk inherent in Als' activities. These developments have posed considerable challenges in ensuring that the competency levels of Als' staff keep pace with changes. Against this backdrop and the increasing supervisory focus on the competency of individuals within the banking industry in overseas jurisdictions, driven to some degree by the global financial crisis, the HKMA has developed a new module in its SPM to provide guidance on the measures Als are expected to adopt in monitoring and maintaining competence and ethical behaviour. The guidance, entitled "Competence and Ethical Behaviour", was issued for industry consultation in the first quarter of 2011.

Corporate governance

The global financial crisis has focused attention on the importance of effective corporate governance and risk management in the prevention of loss and failure in the financial system. Drawing on the lessons learned from the crisis, the Basel Committee issued a set of *Principles for Enhancing Corporate Governance* in October setting out best practices for banking organisations. As an update to the Basel Committee's corporate governance principles issued in 2006, the 2010 guidance has strengthened areas such as the role of the board; the qualifications and composition of the board; the importance of monitoring risks on an ongoing firm-wide and individual entity basis; the board's oversight of remuneration systems; and the board and senior management's understanding of the bank's operational

structure and risks. In December 2010, Hong Kong Exchanges and Clearing Limited (HKEx) also published a consultation paper on proposed changes to the Code on Corporate Governance Practices and certain Listing Rules relating to corporate governance to promote the development of higher corporate governance standards.

The HKMA plans to update its existing SPM module CG-1 "Corporate Governance of Locally Incorporated Authorized Institutions", which was issued in 2001, to bring it into line with the Basel Committee's enhanced principles and other developments in best practice. The enhanced guidance is proposed to be released for industry consultation within the first half of 2011.

Credit risk transfer

One of the weaknesses exposed by the financial crisis was inadequate risk management relating to securitisation exposures and other aspects of credit risk transfer activities. As a result, international standard-setters (including the FSB, the Joint Forum, the Basel Committee and IOSCO) and regulators in major financial centres have put forward a number of proposals to refine regulatory regimes and strengthen banks' risk management systems and practices. While Als' exposures to credit risk transfer activities are in general immaterial, the HKMA is reviewing its existing guidance on securitisation and credit derivatives to bring them into line with the latest international standards. This will require Als, for example, to conduct their own analysis of the credit and other risks of structured products and to avoid over-reliance on external credit ratings. Industry consultation on the enhanced guidance is expected to take place in the first half of 2011.

Development of supervisory policy (continued)

Stress-testing

The HKMA intends to finalise the revised supervisory guidance on stress-testing in the first half of 2011, taking into account the comments received from the industry consultation.

Central counterparty clearing and reporting to trade depositories for OTC derivatives transactions

The implementation in Hong Kong of the recommendations in the FSB's report *Implementing OTC Derivatives Market Reforms* released in October 2010 will entail infrastructural improvements through the establishment of a central counterparty clearing facility by HKEx and a trade repository by the HKMA. A supervisory guideline setting out the clearing and reporting requirements for AIs is currently being

developed by the HKMA. This work is progressing in collaboration with the SFC and the market through a number of joint agency and industry forums. The HKMA plans to formally consult the industry on the proposed regulatory framework as soon as practicable in 2011, with the aim of implementing the requirements by the international deadline of 2012.

Market risk management

To bolster AIs' market risk management standards following the global financial crisis, the HKMA will incorporate into a new supervisory guideline the latest international developments on market risk management. The draft guidance is expected to be issued for industry consultation in the second half of 2011.

Accounting and disclosure standards

The IASB is expected to finalise in 2011 a number of key accounting standards, such as those relating to fair value measurement, hedge accounting, revenue recognition and leases. The HKMA and the banking industry will continue to monitor these developments and contribute to the standard-setting process in conjunction with the HKICPA.

The HKMA will promote greater transparency on AIs' securitisation and market risk exposures, capital adequacy and liquidity through its implementation of the disclosure requirements relating to the Basel Committee's July 2009 enhancements to Basel II and the Basel III framework. The Basel Committee also issued for consultation in December 2010 a set of Pillar 3 requirements relating to disclosure on remuneration. The HKMA has encouraged the industry associations to respond to the consultation. The adoption of these global standards will further promote greater convergence and consistency of disclosures by AIs and hence more effective market discipline. The HKMA will continue discussions with the banking industry on further developments in the area of disclosure and assessing their implications on AIs' financial reporting and the regulatory framework for possible implementation of any new international standards.

Stress-testing

The HKMA will continue to review and refine its stress-testing framework in the light of evolving market conditions as well as international developments on stress-testing techniques.

Macro-prudential surveillance

Up-to-date and risk-focused supervisory information is essential for the formulation of timely and effective supervisory responses to emerging systemic risks. Priority is being given to further enhance the HKMA's management information system for banking supervision, including the development of techniques that will allow the construction of more comprehensive scenarios for use in its regular internal stress-testing exercise for AIs. The stress parameters employed will be regularly reviewed in the light of market developments.

As part of the Basel III reforms, priority will also be given to developing policies and procedures to implement the countercyclical capital buffer in Hong Kong.

Consumer protection

The HKMA will work to improve the standards of banking practices through participation in the Code of Banking Practice Committee, and will monitor Als' compliance with the Code through regular self-assessments, mystery shopper exercises and the handling of complaints about services and products provided by Als. On-site examinations of banks will also be conducted to supplement the self-assessments in an effort to improve consumer protection.

Credit card practices are one of the areas being pursued as part of the HKMA's initiative to promote the fair treatment of consumers. It will continue to discuss with the industry relevant developments and trends overseas, with a view to adopting measures applicable to the Hong Kong credit card market that will help foster fairness and transparency.

In relation to the proposed establishment of an Investor Education Council and a Financial Dispute Resolution Centre, the HKMA will work with the Financial Services and the Treasury Bureau, the SFC and the industry to prepare for their establishment.

Credit data sharing

Another priority for the HKMA in 2011 will be to work with the industry and the Privacy Commissioner to implement an appropriate regime for positive mortgage data sharing based on the public consultation results and decisions made by the Privacy Commissioner.

Enforcement

The HKMA and the SFC will continue disciplinary proceedings against implicated banks and individuals (Executive Officers and Relevant Individuals) arising from the completion of the Lehman-related investigation.

In view of the experience gained in handling an unprecedented number of complaints after the collapse of Lehman Brothers, the HKMA will

- enhance its complaint handling and investigation process by streamlining its internal procedures, simplifying the gathering of information from complainants, and introducing video and audio interview facilities
- revise its supervisory guideline "IC-4 Complaint Handling Procedures" to take account of recent developments
- assist the Government in reviewing the present regulatory framework governing the sale of investment products to retail investors and developing the financial dispute resolution mechanism.

Deposit protection

The HKMA will assist the Hong Kong Deposit Protection Board in implementing and operating the enhanced DPS. The Board will focus on further streamlining the DPS operation, and the HKMA will assist the Board to monitor Scheme members' compliance with the representation requirements, mainly through a series of on-site examinations. Advertising campaigns and other outreach programmes will be held throughout 2011 to maintain peoples' awareness of the DPS and reinforce their understanding of the Scheme's main features. Simulation tests, compliance reviews and payout rehearsals will be conducted by the Board to ensure the operational readiness of the DPS.

Payment systems oversight

As the overseer of designated systems under the CSSO, the HKMA will continue to be involved in promoting and ensuring the safety and efficiency of these systems; and will continue to monitor the performance of the operators of retail payment systems under their self-regulatory codes of practice, keep abreast of global trends and improve the current regime where necessary.