

The banking sector in Hong Kong remained sound and stable in 2019, notwithstanding the headwinds brought by the weakening global and local economies. Thanks to the concerted efforts of the industry, the banking sector continued to operate normally amidst the social events. Efforts were taken to ensure that inconvenience caused to the public was kept to a minimum. During the year, the HKMA focused its supervision on the credit and liquidity risk management of authorized institutions. In view of escalating cyber threats and the industry's growing dependency on technology, the HKMA stepped up the supervision of authorized institutions' technology risk management. On conduct supervision, the HKMA streamlined its investor protection measures to enhance customer experience while according protection to customers. We also enhanced consumer protection in digital financial services and continued to promote a customer-centric corporate culture.

On anti-money laundering and counter-financing of terrorism (AML/CFT), 2019 marked the conclusion of the Financial Action Task Force's Fourth Round Mutual Evaluation of Hong Kong's AML/CFT regime, which was assessed as compliant and effective overall, and earned positive recognition particularly for the banking sector's good understanding of risks and the HKMA's risk-based supervisory work in AML/CFT. The HKMA has continued to participate in the public-private partnership for intelligence sharing on fraud and money laundering, and its active support for the adoption of AML/CFT regulatory technology in the banking sector.

On banking development, the HKMA granted banking licences to eight virtual banks in 2019 and announced a three-phased approach to facilitate the development of green and sustainable banking in Hong Kong. The HKMA has been in close collaboration with the banking industry to optimise supervisory policies and processes and to carry out capacity-building initiatives that facilitate talent development.

Meanwhile, substantial progress was made on the local implementation of international supervisory standards, including capital adequacy standards, disclosure standards, liquidity standards and large exposure standards. The HKMA also continued its work to ensure there would be a credible resolution regime for authorized institutions, including implementing rules on loss-absorbing capacity requirements to enhance the resolvability of authorized institutions.

OBJECTIVES

The HKMA has a general objective to promote the safety and stability of the banking system. Achieving this objective is contingent upon the financial system being highly resilient and capable of providing the critical financial services the Hong Kong economy needs.

Banks can affect the stability of the system through the way they carry out their businesses and, in extremis, by failing in a disorderly manner. The Monetary Authority, as a supervisory authority, plays a key role in safeguarding financial stability by ensuring banks are resilient to shocks and are able to recover their positions in response to crises, ultimately helping to prevent failures. The Monetary Authority is responsible for the prudential supervision of banks in Hong Kong. It is tasked with the authorization of licensed banks, restricted licence banks and deposit-taking companies in Hong Kong, which are collectively known as authorized institutions (Als). The Monetary Authority is also responsible for the designation and oversight of certain financial market infrastructures (FMIs).

However, the Monetary Authority cannot ensure, nor is the Hong Kong prudential regulatory framework designed to ensure, a zero-risk financial system. Instead, the Monetary Authority, as a resolution authority, seeks to ensure that, in the event of an AI becoming non-viable, its failure can be managed in an orderly manner. To this end, a resolution regime for financial institutions in Hong Kong has been established, under which the Monetary Authority is the resolution authority for Als. To ensure that the resolution regime in Hong Kong is operational, it is important to lay down resolution legislation and policy standards, undertake resolution planning to remove impediments to Als' resolvability and develop the HKMA's operational capability to resolve a failing Al. In order to carry out these tasks effectively, the HKMA adopts an internationally harmonised and co-ordinated approach.

REVIEW OF 2019

Overview of supervisory activities

In 2019, 196 off-site reviews were conducted covering a broad range of issues, including CAMEL rating assessment¹, corporate governance, risk management and fintech strategies. As part of the HKMA's continued efforts to promote stronger risk governance, 26 meetings were held with the boards of directors or board-level committees of Als. Furthermore, 32 tripartite meetings were held among the HKMA, the Als and their external auditors.

Apart from off-site activities, the HKMA conducts regular on-site examinations supplemented with thematic reviews on areas assessed to be of higher risk. A total of 405 on-site examinations and thematic reviews were conducted during the year. Credit risk management remained a key focus of these examinations and reviews. Another major focus was in technology risk and operational risk management. The HKMA also increased the number of on-site examinations and thematic reviews targeted at liquidity and market risk management as well as the implementation of the Basel capital adequacy framework. At the same time, specialist teams performed on-site examinations and thematic reviews of Als' activities in securities, investment products, insurance and Mandatory Provident Fund (MPF)-related businesses.

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

Table 1 contains an overall summary of the HKMA's supervisory activities in 2019.

Table 1 Summary of supervisory activities		
	2019	2018
1 Off-site reviews and prudential interviews	196	187
2 Meetings with boards of directors or board-level committees of Als	26	27
3 Tripartite meetings	32	28
4 Culture dialogues	4	0
5 On-site examinations	104	100
Credit risk management and controls	0	0
Technology risk and operational risk management	12	23
AML/CFT controls	17	20
Liquidity risk management	0	2
Implementation of Basel capital adequacy framework	9	8
Capital planning	6	3
Market risk, counterparty credit risk and treasury activities	6	8
Securities, investment products, insurance and MPF-related businesses	23	18
Consumer protection	2	0
Deposit Protection Scheme-related representation	12	12
Overseas examinations	17	6
6 Thematic reviews	301	292
Credit risk management and controls	50	91
Technology risk and operational risk management	76	70
AML/CFT controls	61	44
Implementation of Basel capital adequacy framework	4	5
Sale of investment and insurance products	30	9
Consumer protection	42	42
Liquidity risk	23	21
Market risk	15	10
Total	663	634

Supervision of credit risk

Credit growth and asset quality

Bank lending increased moderately in 2019. Total loans grew by 6.7%, compared with 4.4% in 2018. As shown in Table 2, loans for use in Hong Kong and loans for use outside Hong Kong registered growth of 7.7% and 5.8% respectively.

Table 2	Growth in loans and advances		
% change		2019	2018
Total loans and advances		6.7	4.4
Of which			
– for use	in Hong Kong	7.7	6.5
– trade fii	nance	-0.7	-7.6
– for use	outside Hong Kong	5.8	2.0

Mainland-related lending grew by 7.4% to HK\$4,564 billion as at the end of 2019 (Table 3).

Table 3	Growth in Mainland-related lending		
% change		2019	2018
Total Mainland-related lending		7.4	1.5
Of which			
– Mainlar	nd-related lending		
(excluding trade finance)		7.1	2.8
– trade fir	nance	11	-14.9

The asset quality of Als remained healthy. Retail banks' classified loan ratio edged down from 0.51% at the end of 2018 to 0.48% at the end of 2019, well below the long-run historical average of 2% since 2000. For the banking industry as a whole, the classified loan ratio increased slightly from 0.55% to 0.57%. Specifically in terms of Mainland-related lending, retail banks' classified loan ratio increased from 0.63% in 2018 to 0.79% in 2019, which was still low by historical standard. For the banking industry as a whole, the ratio increased to 0.75% from 0.55% a year ago.

During the year, the HKMA devoted increased supervisory efforts in ensuring that Als continued to adopt prudent credit risk management standards amid the uncertain economic environment. Solvency stress tests were enhanced to incorporate more comprehensive risk coverage and more severe stress assumptions. The results of the enhanced stress tests continued to indicate that banks generally had sufficient capital buffers to withstand extreme shocks. Targeted and thematic examinations were conducted to evaluate the credit risk management practices of Als in different areas, such as lending to corporates engaged in high-risk business, complex financing arrangements, and collateralised lending to private banking and wealth management customers. Recognising that small and medium-sized enterprises (SMEs) would more likely face greater challenges during economic downturns, the HKMA established a Banking Sector SME Lending Co-ordination Mechanism in October, with a view to encouraging banks to continue to support SMEs' financing needs to the extent permitted by prudent risk management principles.

Property mortgage lending

The resilience of the Hong Kong banking sector to withstand a downturn in the property market has been strengthened significantly by the eight rounds of countercyclical macro-prudential measures introduced by the HKMA since 2009. The average loan-to-value (LTV) ratio of new residential mortgage loans fell to 53% in December 2019 from 64% in September 2009, before the countercyclical measures were first introduced. The average debt servicing ratio (DSR) of new mortgages also decreased to 36% in December 2019 from 41% in August 2010, when a cap on DSR was first applied (Chart 1).



Supervision of operational and technology risk

The HKMA adopts a three-phased approach to implement the Cyber Resilience Assessment Framework under the Cybersecurity Fortification Initiative (CFI). Phase One assessment, involving all the major banks, was completed in 2018. The remaining Als covered in the second and third phases have substantially completed the assessment as scheduled. The HKMA has also embarked on a comprehensive review of the CFI to fine-tune the initiative given the experience gained in the past years.

In October, the HKMA issued a revised Supervisory Policy Manual (SPM) module on "Risk Management of E-banking". The revision sought to provide the industry with greater flexibility to meet changing customer expectations on electronic banking services. The HKMA also published a set of high-level principles on the use of artificial intelligence in order to provide guidance for the industry.

Since the social events started in June, the HKMA have maintained close dialogue with the industry to monitor the impact on banking operations and services. Banks were requested to replenish automated teller machines (ATMs) more frequently and repair vandalised facilities as soon as practicable. The HKMA also acted quickly to refute malicious rumours that sought to undermine the public's confidence in the banking system. Thanks to concerted efforts by the banking industry, the affected bank branches and facilities quickly resumed normal services and the inconvenience caused to the public was kept to a minimum. In view of the rising operational risk posed by the social events, banks were asked to take additional precautionary measures to strengthen their operational resilience.

Supervision of liquidity and market risk management

During the year, a round of thematic reviews was conducted to assess Als' capability to cope with liquidity shocks. The reviews focused on the robustness of Als' liquidity stress testing programmes and contingency funding management. The HKMA also assessed Als' compliance with the regulatory requirements on the calculation of the Liquidity Coverage Ratio (LCR) to ensure the prudence and accuracy of the inputs used for the calculation.

As algorithmic trading gained popularity in the banking industry, the HKMA conducted a round of thematic reviews to evaluate Als' risk management practices in this area. Considering that the London Interbank Offered Rate (LIBOR) might cease to be published after end-2021, the HKMA reminded Als to get prepared for the transition to alternative reference rates and conducted a survey to monitor their preparedness for the transition.

Combating money laundering and terrorist financing (ML/TF)

The HKMA carries out risk-based supervision of Als' AML/CFT systems. During the year, 18 on-site examinations and 61 off-site reviews were conducted, including targeted thematic reviews on private banking and the governance of the use of new technology. The HKMA shared with the industry the observations and best practices drawn from a thematic review of Als' application of risk-based AML/CFT controls for SMEs, in order to assist Als to adopt appropriate account opening processes and delivery of services for SMEs.

Financial Action Task Force (FATF) Mutual Evaluation (ME) Report on Hong Kong

A highlight of 2019 for the HKMA and Hong Kong's overall AML/CFT regime was the publication of the FATF ME Report on Hong Kong in September. The Report represents one of the best overall results to date in the FATF's fourth-round ME of its member jurisdictions. Hong Kong scored six "Substantial" ratings out of 11 "Immediate Outcomes" in the assessment of the effectiveness of its AML/CFT regime², and a high mark for the technical compliance aspect of the ME.

The Report favourably assessed the HKMA's risk-based approach to AML/CFT supervision, noting that the HKMA had a good understanding of ML/TF risks in the banking sector and a reasonable understanding of risks in the stored value facility (SVF) sector. The Report also positively assessed the collective AML/CFT efforts of the banking sector, such as the increased use of data analytics by larger Als, the fact that the great majority of suspicious transaction reports were filed by Als, and the sector's proactive participation in the Fraud and Money Laundering Intelligence Taskforce (FMLIT).

The Report recommended several areas for improvement, including the understanding of some higher-risk areas, such as foreign corruption and tax crimes, and developing sectors such as SVFs. Work has already started to address these recommendations; the HKMA published an updated ML/TF Risk Assessment on the SVF sector in July and has commenced thematic on-site examinations on private banking and the governance of the use of new technology.



HKMA Deputy Chief Executive, Mr Arthur Yuen (fourth from left), and his team holds meetings with the FATF assessors in April.

The effectiveness assessment in the ME covers 11 Immediate Outcomes, with each rated as "High", "Substantial", "Moderate" or "Low" to indicate the level of effectiveness. Each Immediate Outcome relates to a different aspect of the AML/CFT regime.

To deepen collaboration within Hong Kong's AML/CFT ecosystem, the HKMA contributed to the review of the FMLIT, which was initially set up on a pilot basis, leading to its permanent establishment in June. The FATF ME Report recognised the contribution of this public-private information sharing platform to combating ML threats³. In response to the FATF's recommendations to enhance the FMLIT's performance, consideration is being given to further develop the FMLIT into a sustainable platform that leverages technology and data analytics to support the AML/CFT efforts of the banking sector.

Moreover, as part of its broader digitalisation programme, the HKMA is exploring how technology and data can help foster Hong Kong's AML/CFT ecosystem. In April, a consultancy study was initiated to recommend strategies and practical options to enhance the HKMA's AML/CFT surveillance capability through the greater use of technology and to support increased industry adoption of regulatory technology (Regtech). The HKMA hosted its first AML/CFT Regtech Forum in November. Around 400 representatives of Als, Regtech companies and other stakeholders took part in the Forum to share their experiences and insights about the use of Regtech for AML/CFT purposes in a series of panel discussions and break-out sessions.

Throughout the year, the HKMA provided AML/CFT regulatory engagement to Als through its Fintech Supervisory Chatroom and Sandbox, offering early supervisory responses to new ideas from the banking industry and supporting proofs of concept so that products could be tested and launched safely. A number of banks have already launched remote customer onboarding services following the discussion and testing through these channels. Remote onboarding will become more widely adopted as the virtual banks commence business. In February, the HKMA also issued key supervisory principles for meeting customer due diligence (CDD) obligations and applying the principle of risk-based approach in cases of remote account opening. In December, the HKMA provided guidance to the banking and SVF sectors on managing ML/TF risks associated with virtual assets and related service providers, making reference to the updated FATF Recommendation.

Since its launch in May 2017 and up to the end of December 2019, the FMLIT delivered 454 intelligence-led suspicious transaction reports, leading to 181 arrests, HK\$616 million being restrained or confiscated, and HK\$106 million in losses prevented.

Supervision of wealth management and MPF-related businesses

The HKMA co-operates closely with other financial regulators in Hong Kong to provide guidance and supervise Als' practices in the sale of securities, investment products, insurance products and MPF schemes. The HKMA also maintains regular dialogue with other regulators through bilateral and multilateral meetings, as well as under the auspices of the Council of Financial Regulators, to ensure co-ordinated and effective supervisory actions. During the year, the HKMA conducted 23 on-site examinations, 30 thematic reviews and 12 analyses of surveys and returns of Als, covering the sale of investment, insurance and MPF products.

As part of its Balanced and Responsive Supervision initiative, the HKMA has streamlined and refined investor protection measures on the sale of investment, insurance and MPF products, and provided guidance accordingly to enhance customer experience. The refinements took into account evolving market conditions, customers' expectations and the HKMA's supervisory experience in recent years.

In respect of the investment-selling activities of registered institutions (RIs), the HKMA provided clarification and further guidance to RIs in July, in order to address industry comments on the implementation of enhanced investor protection measures governing the sale and distribution of debt instruments with loss-absorption features and related products. The HKMA provided further guidance to RIs in November on the prevention, detection, and mitigation of misconduct risks in the selling of investment funds.

In view of the technological advancements in recent years, the HKMA strengthened the surveillance of RIs' online distribution and advisory platforms through comprehensive surveys. To better identify risks associated with the selling activities and areas of concern, the HKMA worked with the Securities and Futures Commission (SFC) to launch an annual joint survey on the sale of non-exchange traded investment products.

In respect of the insurance-selling activities of Als, the HKMA worked closely with the Insurance Authority (IA) on the implementation of the new statutory regime under the Insurance Ordinance (IO) for insurance intermediaries. Pursuant to the new statutory regime, which came into operation on 23 September 2019, the IA delegated to the Monetary Authority its inspection and investigation powers in relation to businesses of regulated activities under the IO carried on by Als. To strengthen the co-operation between the two authorities, the HKMA entered into a new Memorandum of Understanding (MoU) with the IA setting out, amongst others, the arrangements on supervision, complaint handling and enforcement. With the introduction of tax incentives for qualifying deferred annuity policies in April, the HKMA issued a circular on the disclosure requirements in selling such products. In the light of the long-term nature, complexity, and increasing popularity of annuity insurance products, the HKMA issued a circular in September to enhance the customer protection measures applicable to Als in selling such products. Furthermore, with the increasing popularity of medical insurance products, the HKMA issued two circulars in June and November to remind Als to comply with the relevant regulatory requirements applicable to the sale of such products, in particular those on customer suitability and product disclosure.

The HKMA had completed the fieldwork of a mystery shopping programme (MSP) to check Als' selling practices in respect of investment and insurance products, and will share the key observations and good practices with the industry.

During the year, the HKMA processed two applications relating to the addition of regulated activities of RIs. It granted consent to 148 executive officers responsible for supervising the securities activities of RIs, and conducted background checks on 9,450 individuals whose information was submitted by RIs for inclusion in the register maintained by the HKMA.

Other supervisory activities

The Banking Supervision Review Committee considered 18 cases concerning the granting of banking licences and approval of money brokers in 2019 (see Table 4 for details).

During the year, the HKMA commissioned 18 reports under section 59(2) of the Banking Ordinance (BO), which required Als to appoint external professional firms to report on the effectiveness of their controls in specified areas of operation. Three of these reports covered credit risk management, another two covered AML/CFT controls, and the remaining reports were related to areas such as compliance with the BO and the adequacy of senior management oversight and the risk governance framework.

In 2019, there was no breach incident by Al on the requirements of the BO relating to the capital adequacy or liquidity ratio. There were 31 breaches of other provisions of the BO, mostly related to Als' reporting obligations under the BO. These breaches did not affect the interests of depositors and were promptly rectified by the Als.

During the year, the CAMEL Approval Committee completed a review of the CAMEL ratings of all the 196 Als. No Al appealed against the Committee's decision.

Table 4 Summary of other supervisory activities			
		2019	2018
1	Cases considered by th	e Banking	
	Supervision Review (Committee 18	5
2	2 Reports commissioned under		
	section 59(2) of the E	BO 18	17
3	Approval of application	ns to	
	become controllers,	directors,	
	chief executives or a	ternate	
	chief executives of A	ls 282	181



International co-operation

Co-operation with overseas supervisors

The HKMA participated in 33 college-of-supervisors meetings organised by the home supervisors of 28 banking groups with significant operations in Hong Kong. A broad range of issues were discussed at these meetings, covering areas such as financial soundness, corporate governance, risk management and internal controls, and operational resilience.

The HKMA is a member of each of the Crisis Management Groups (CMGs) for 12 global systemically important banks (G-SIBs) attended by the relevant home and host authorities. On the regional level, the HKMA leads the regional resolution planning for a G-SIB with its Asia-Pacific headquarters in Hong Kong, organising the Asia CMG meeting, and is a member of the Asia-Pacific Recovery and Resolution Planning College for two other G-SIBs where resolution-related topics are discussed.

Bilateral meetings were held during the year with banking supervisors from Australia, the European Union, India, Japan, Liechtenstein, Macao, Mainland China, Malaysia, Singapore, Switzerland, Taiwan, Thailand and the US. There were also regular exchanges with overseas authorities on institution-specific issues and developments in financial markets.

Participation in international and regional forums

The HKMA participates in a range of international and regional forums for banking supervisors. It is a member of the Basel Committee on Banking Supervision (Basel Committee) and its governing body, the Group of Governors and Heads of Supervision, and is represented on various Basel Committee working groups, including the Policy Development Group (PDG), the Macroprudential Supervision Group, the Supervision and Implementation Group (SIG), and the AML/CFT Expert Group. The HKMA is also a member of several sub-groups under (i) the PDG, including the Working Group on Capital, the Credit Risk Group, the Market Risk

Group, the Operational Resilience Working Group, the Working Group on Liquidity, the Large Exposures Group and the Working Group on Disclosure; and (ii) the SIG, including the Stress Testing Network, the Task Force on Financial Technology and the Colleges Monitoring Network. In addition, the HKMA chairs the SIG and the Risk Data Network under the SIG. The HKMA also participates in the joint Working Group on Margin Requirements formed by the Basel Committee and the International Organization of Securities Commissions (IOSCO).

On AML/CFT, besides the AML/CFT Expert Group under the Basel Committee, the HKMA also participates actively in plenary meetings of the FATF and the Asia/Pacific Group on Money Laundering, as part of its efforts in combating ML/TF with the most up-to-date international standards and practices.

The HKMA is a member of the Financial Stability Board (FSB) Plenary Meeting, the FSB Standing Committee on Assessment of Vulnerabilities and the FSB Standing Committee on Supervisory and Regulatory Co-operation. It also participates in several FSB working groups, including the Over-The-Counter (OTC) Derivatives Working Group, the Compensation Monitoring Contact Group, the Official Sector Steering Group on Financial Benchmarks, and the Working Group on Non-Bank Financial Intermediation. In the area of resolution, and in addressing the problem of "too big to fail", the HKMA is a member of the FSB Resolution Steering Group (ReSG) and the FSB Cross-border Crisis Management (CBCM) Working Group for banks.

At the regional level, the HKMA is a member of the Executives' Meeting of East Asia-Pacific Central Banks (EMEAP)⁴, the South East Asia, New Zealand and Australia Forum of Banking Supervisors, and the South-East Asian Central Banks group.

EMEAP is a co-operative organisation of central banks and monetary authorities in the East Asia and Pacific region.

As part of its work in the EMEAP Working Group on Banking Supervision (WGBS), the HKMA is the champion of the Interest Group on Liquidity (IGL). During the year, the IGL exchanged views and shared experience regarding the implementation of Basel III liquidity standards in the EMEAP jurisdictions. The HKMA is also the chair and serves as the secretariat of the Focused Meeting on Resolution (FMR), a resolution-specific forum under the WGBS. The FMR supports knowledge sharing and discussion among regional authorities in relation to resolution in a cross-border context. See "International policy and stakeholders' engagement" on page 94 for more details.

Financial Sector Assessment Program (FSAP)

Following the previous full assessment completed in 2014, the International Monetary Fund (IMF) commenced the update of FSAP assessment for Hong Kong in 2019. Emerging issues and new developments in banking regulation and supervisory practices with respect to the Basel Core Principles for Effective Banking Supervision and the changes to financial safety net and crisis management framework in Hong Kong since the last FSAP were reviewed. The HKMA completed a set of comprehensive questionnaires and held extensive meetings with the FSAP assessors during their on-site visit in September to discuss the latest development. The HKMA and the FSAP assessors also conducted a series of liquidity and solvency stress tests on the banking sector. Meetings were arranged for the FSAP assessors to meet government officials, private sector representatives (including banks, audit firms and credit rating agencies) and relevant stakeholders to deepen their understanding of the latest financial development and facilitate their comprehensive review of Hong Kong's financial sector. The FSAP update is still underway and the assessment is expected to be completed in 2020. The HKMA will continue to work closely with the IMF and carefully consider any recommendations.

Basel Committee Regulatory Consistency Assessment Programme (RCAP)

The Basel Committee conducts a RCAP to monitor, assess and evaluate its members' implementation of the Basel standards. The RCAP assessment of Hong Kong, covering the large exposures framework and Net Stable Funding Ratio (NSFR), was conducted in 2019. The RCAP reports for Hong Kong were published in March 2020. Overall, Hong Kong's large exposures and NSFR regulations were assessed as "compliant" with the Basel standards.

In addition to being assessed under the RCAP, the HKMA led an international team of technical experts to conduct an assessment of the implementation of the large exposures and NSFR standards in Australia. The reports of the assessment were published in July 2019. Furthermore, the HKMA participated in assessing the large exposures standards of Brazil, leading to the publication of the corresponding report in March 2019, and it is now taking part in evaluating Japan's large exposures standards.

Implementation of Basel Standards in Hong Kong

Exposure limits

A full set of Banking (Exposure Limits) Rules (BELR) made under section 81A of the BO took effect on 1 July 2019 to replace the former BO provisions on exposure limits. The BELR aim to implement the 2014 Basel Committee standard on the *Supervisory Framework for Measuring and Controlling Large Exposures* and also to update other exposure limits to keep pace with market developments and contemporary risk management techniques. Certain provisions of the BELR were subject to a six-month implementation grace period which ended in December 2019.

Capital standards

The process of making rules continued for the implementation of three Basel Committee capital standards, viz. The Standardised Approach for Measuring Counterparty Credit Risk Exposures (SA-CCR), Capital Requirements for Bank Exposures to Central Counterparties (CCP standard) and Capital Requirements for Banks' Equity Investments in Funds (EIF standard). In view of industry comments and the latest implementation schedules of major markets, the SA-CCR and the CCP standard are targeted for implementation in Hong Kong sometime around mid-2021. Amendments to the Banking (Capital) Rules (BCR) on implementing the SA-CCR and the CCP standard were issued in March 2020 for statutory consultation as required under the BO before being finalised for submission to the Legislative Council. For the EIF standard, proposed amendments to the BCR were being prepared in consultation with the industry.

To inform policy formulation for the implementation of the "Basel III: Finalising Post-crisis Reforms" published by the Basel Committee in December 2017 ("Final Basel III package"), the HKMA conducted a local quantitative impact study (QIS) on a representative sample of local banks, covering the estimated impacts of the revised internal ratings-based (IRB) approach, the revised standardised approach for credit risk, the revised operational risk framework and the output floor. The HKMA initiated another QIS exercise in March 2020, covering the revised market risk framework issued by the Basel Committee.

On 14 October 2019, the HKMA reduced the jurisdictional Countercyclical Capital Buffer for Hong Kong from 2.5% to 2.0% with immediate effect to allow banks to be more supportive of the domestic economy. In line with the Basel Committee's framework for dealing with domestic systemically important banks (D-SIBs), the HKMA announced in December an updated list of D-SIBs for 2020 and their corresponding higher loss-absorbency capital requirements.

Interest rate risk in the banking book (IRRBB)

On 1 July 2019, the new local IRRBB framework came into effect. The framework is based on the 2016 Basel Committee standards on "Interest rate risk in the banking book" and follows a standardised approach. It provides for a more sophisticated and comprehensive set of measures to identify banks with significant IRRBB exposures.

Disclosure standards

Further to the implementation of the first and second phases of the Basel Committee's revised Pillar 3 disclosure requirements, the HKMA consulted the industry and issued in March a set of revised standard disclosure templates and tables to incorporate disclosure requirements set out in the document "Technical Amendment — Pillar 3 Disclosure Requirements: Regulatory Treatment of Accounting Provisions", released by the Basel Committee in August 2018, together with a few regulatory updates.

Liquidity standards

The Banking (Liquidity) (Amendment) Rules 2019 were introduced to (i) recognise Basel-compliant listed ordinary shares and triple-B rated marketable debt securities as "level 2B assets" under the LCR and (ii) implement a required stable funding requirement on total derivative liabilities under the NSFR, in line with the Basel Committee's current guidance. Similar amendments were also made to the Liquidity Maintenance Ratio and the Core Funding Ratio. The amendments took effect on 1 January 2020.

Improving Supervisory Policy Framework

Regulation of over-the-counter derivatives transactions

The HKMA introduced global margin and risk mitigation standards in 2017 for Als involved in non-centrally cleared OTC derivatives transactions. The initial margin requirements have been implemented in phases since 1 March 2017, expanding the scope of covered entities. To support a smooth and orderly implementation of the margin requirements, the HKMA will adopt the revised implementation schedule as announced by the Basel Committee and IOSCO. The HKMA will continue to monitor Als' implementation of the remaining phases and co-ordinate with other member jurisdictions of the Basel Committee and IOSCO Working Group on Margin Requirements on the implementation and market developments.

Updating other supervisory policies and risk management guidelines

The HKMA finalised and issued the revised SPM module on "Guideline on the Application of the Banking (Disclosure) Rules" in August. The revisions updated the interpretative guidance on the application of the Banking (Disclosure) Rules, which have been amended substantially since 2017 to incorporate the first two phases of the Basel revised Pillar 3 disclosure requirements.

The HKMA consulted the industry on proposed revisions to SPM module RE-1 on "Recovery Planning", to reflect developments in international and local standards and practices in the recovery planning of Als.

In connection with the implementation of the BELR, the HKMA revised the SPM modules CR-G-8 "Large Exposures and Risk Concentrations", CR-G-9 "Exposures to Connected Parties", CR-L-1 "Consolidated Supervision of Concentration Risks: BELR Rule 6", CR-L-3 "Letters of Comfort: BELR Rule 57(1) (d)", CR-L-4 "Underwriting of Securities: BELR" and CR-L-5 "Major Acquisitions and Investments: BELR Part 3". Key

revisions in these SPM modules provide elaborations on the supervisory approaches, policy intent and implementation guidance on BELR provisions. In addition, the Banking (Exposure Limits) Code was issued to provide technical clarifications to the BELR.

On Pillar 2 of the capital framework, the SPM module CA-G-5 on "Supervisory Review Process" was updated in relation to the local implementation of Basel standards on interest rate risk in the banking book, liquidity risk and large exposures, and to keep abreast of other latest publications issued by the Basel Committee, particularly on securitisation. The revised module was finalised and issued in January 2020.

On liquidity, the SPM module LM-1 on "Regulatory Framework for Supervision of Liquidity Risk" was revised to reflect changes consequential to the commencement of the Banking (Liquidity) (Amendment) Rules 2019 and to keep pace with the latest developments.

In May, the HKMA issued to the industry a proposed revision of the SPM module on "Guideline on a Sound Remuneration System", mainly to align with the latest international regulatory guidance on remuneration practices.

Review of supervisory documents

During the year, a review of supervisory documents was conducted to enhance the completeness of guidelines and circulars maintained on the Supervisory Communication Website, which is the restricted website for the HKMA's supervisory communication with Als, and to improve the user-friendliness of these documents by refining their structure, classification, and drafting styles. The completeness of the supervisory documents was verified and established with reasonable assurance. Foundational work was also concluded on refining the structure, classification, and drafting style of supervisory documents.

Compliance with regulatory regime for over-the-counter derivatives market

The HKMA monitors closely the compliance of Als and approved money brokers (AMBs) based on the mandatory reporting, clearing, and related record-keeping requirements on OTC derivatives transactions as stipulated in the Securities and Futures Ordinance. Close dialogue is maintained with Als, AMBs and other industry participants on various reporting issues to facilitate their compliance with the relevant requirements arising from OTC derivatives market developments and evolving international standards.

Balanced and responsive supervision

The HKMA engages with the banking industry to optimise supervisory policies and processes to maintain an appropriate balance between supervisory effectiveness and sustainable market development. In 2019, the HKMA obtained useful input from banks to refine policies on the risk management of e-banking and investor protection measures, and to develop guiding principles on customer protection relating to banks' use of big data analytics and artificial intelligence. Banks' input provided insights from various perspectives, such as compliance effectiveness, the adoption of new technologies and the improvement of customer experience. Through a structured feedback process, the HKMA gained a better understanding of possible policy implications for banks before reaching a conclusion on policy refinements.

The HKMA also had constructive discussions with the banking sector on how to mitigate the risk of hiring individuals with a history of misconduct. The industry feedback was useful for the HKMA to develop detailed policy proposals.

Accounting standards

With the implementation of International Financial Reporting Standard 9 (IFRS 9) *Financial Instruments* in 2018, the HKMA has continued to improve its understanding of approaches adopted by Als to provide for expected credit loss (ECL) and to adjust the ECL in response to changing economic conditions. The HKMA also participated in discussions with other regional authorities on the regulatory and supervisory implications of ECL implementation.

Regular dialogues were conducted between the HKMA and the Banking Regulatory Advisory Panel of the Hong Kong Institute of Certified Public Accountants on topics of common interest. These included international and domestic developments on new or revised accounting, auditing and financial reporting standards and their implications for banks, as well as major international and domestic banking regulatory developments.

Green and sustainable banking

The HKMA conducted a survey on selected Als in April to understand local developments in green and sustainable banking. In May, as part of its measures to support Hong Kong's green finance development, the HKMA announced a three-phased approach to promote green and sustainable banking.

During the year, to develop a framework to assess the "greenness" baseline of Als, a working group consisting of representatives from 22 Als was formed, and had convened meetings to exchange views on how the framework should be structured. In December, the HKMA consulted the industry on a draft assessment framework.

For more details about the HKMA's policy framework for green and sustainable banking, see the *Corporate Social Responsibility* chapter.

Resolution

In 2019, the HKMA continued to make significant progress in advancing its objectives on resolution policy, resolution planning and resolution execution capability. Table 5 below provides a high-level overview of the progress to date in establishing and operationalising the resolution regime for Als in Hong Kong.

Table 5	HKMA's progress in developing an operational resolution regime for Als ⁵			
	2018 and before	2019	2020 and beyond	
Resolution Framework	 FIRO came into effect Protected Arrangements Regulation came into effect Published CoP chapter RA-1 Designated as lead resolution authority for cross-sectoral G-SIB groups in Hong Kong 	Continued to operationalise resolution regime	Review and update FIRO as appropriate	
Resolution Standards	 Published CoP chapters RA-2 and CI-1 LAC Rules came into effect Updated CHATS scheme rules to support continuity of access for Als in resolution 	 Published CoP chapter LAC-1 and LAC Disclosure Templates Developed proposals on rules to contractually stay the exercise of early termination rights in resolution Updated CMU scheme rules to support continuity of access for Als in resolution 	Ensure standards are in place to address impediments to resolvability	
Resolution Planning	 Established resolution planning programmes and determined preferred resolution strategies for all D-SIBs Worked with an Al to set up a new clean holding company and a service company in Hong Kong Advanced regional resolution planning and cross-border co-operation Promoted a co-ordinated approach to cross-border LAC pre-positioning 	 Implemented LAC requirements for D-SIBs, building up a new layer of LAC resources Advanced resolution planning for D-SIBs, assessing and removing impediments to orderly resolution Continued leading regional resolution planning including organising regional meetings Carried out cross-border resolution planning at 12 CMGs and other Resolution Colleges 	Ensure priority Als are resolvable by their compliance with resolution standards	
HKMA's Execution Capability	 Established HKMA Resolution Office Developed Watchlist Framework and cross-departmental bank crisis co-ordination framework Established CMCG Conducted crisis simulation exercises 	 Established resolution facility as part of the HKMA updated Liquidity Facilities Framework Operated CMCG and enhanced related crisis management frameworks Completed tender process for the Resolution Advisory Framework 	Establish operational capability to execute an orderly resolution	
International Policy and Stakeholders' Engagement	 Contributed to FSB resolution policy development through membership at the FSB ReSG and the FSB CBCM Working Group for banks, chairing the FSB Legal Experts Group, as well as co-chairing the FSB CBCM Internal TLAC Workstream Promoted the setup of EMEAP's new FMR 	 Continued contributing to international and regional policy developments, including chairing the FSB thematic peer review on bank resolution planning which published its report in April Chaired EMEAP's FMR, held workshop and conference calls 	Contribute to international and regional resolution development	

- Authorized institutions

CBCM — Cross-border Crisis Management
CHATS — Clearing House Automated Transfer System

CHAIS — Clearing House Automated Transfer System
CMGs — Crisis management groups
CMCG — Crisis Management Coordination Group
CMU — Central Moneymarkets Unit
CoP — Code of Practice
D-SIBs — Domestic systemically important banks
EMEAP — Executives' Meeting of East Asia-Pacific Central Banks

FIRO — Financial Institutions (Resolution) Ordinance

FMR — Focused Meeting on Resolution FSB — Financial Stability Board

FSB — FINALCIA Stability Board
G-SIB — Global systemically important bank
LAC — Loss-absorbing capacity
LAC Rules — Financial Institutions (Resolution) (Loss-absorbing Capacity Requirements — Banking Sector) Rules
ReSG — Resolution Steering Group
TLAC — Total loss-absorbing capacity

 $See \ https://www.hkma.gov.hk/eng/key-functions/banking/bank-resolution-regime/\ for\ details\ of\ the\ FIRO\ CoP\ chapters\ mentioned\ in\ the\ table.$

Resolution standards

Formulation of policies and standards on loss-absorbing capacity (LAC) continued to be a priority for the HKMA in 2019. The Financial Institutions (Resolution) Ordinance (FIRO) Code of Practice (CoP) chapter "LAC-1 Resolution Planning – LAC Requirements" was issued on 20 March. Following that, the Monetary Authority published on 31 October the standard disclosure templates (LAC Disclosure Templates) for resolution entities and material subsidiaries under the Financial Institutions (Resolution) (Loss-absorbing Capacity Requirements – Banking Sector) Rules (LAC Rules). The LAC Disclosure Templates are modelled on relevant templates from the Basel Committee's March 2017 publication on Pillar 3 disclosure requirements – consolidated and enhanced framework. The progress made by Hong Kong in adopting FSB Total Loss-Absorbing Capacity (TLAC) Standard-consistent policy was acknowledged in the FSB's report on the Review of the Technical Implementation of the TLAC Standard published in July.

A major potential impediment to resolvability is the disorderly early termination of financial contracts in resolution.

To address this impediment, the HKMA worked to develop policy proposals for making rules under the FIRO on contractual stays for Als. The proposals require contractual provisions to be adopted in certain financial contracts that are not governed by Hong Kong law, to give effect to a suspension of termination rights (a "stay") that may be imposed by the Monetary Authority as a resolution authority under the FIRO; this would implement the relevant FSB principles in this regard. The consultation paper setting out the HKMA's policy proposals was published on 22 January 2020 with a consultation period of two months.

The HKMA has taken further industry-wide steps to ensure the orderly management in the event of an Al's failure. Building on previous work to implement the FSB's *Guidance on Continuity of Access to Financial Market Infrastructures for a Firm in Resolution*, the HKMA worked with the Central Moneymarkets Unit (CMU) to update CMU member agreements and documentation to reflect restrictions imposed by the FIRO on termination or suspension of access to clearing and settlement services in respect of an Al in resolution.

Resolution planning

The HKMA continued to advance resolution planning for each of the D-SIBs. As part of bilateral resolution planning programmes with these Als, changes needed to address identified impediments to their resolvability based on their respective preferred resolution strategy are being implemented.

In particular, the D-SIBs are building up a new layer of LAC resources to facilitate their loss absorption and recapitalisation in case of failure, which would reduce the risks to financial stability that may be posed by their non-viability. The HKMA worked closely with the D-SIBs and the relevant home authorities in 2019 on these Als' plan to build up capital and non-capital LAC resources via external or cross-border intra-group issuances. Each of the D-SIBs has been classified by the Monetary Authority as a resolution entity or a material subsidiary pursuant to the LAC Rules in line with the preferred resolution strategy. Some D-SIBs have started complying with their LAC requirements and making public disclosures on their LAC positions.

New operational capabilities and arrangements are being put in place by some of the D-SIBs through group-wide programmes to ensure continuity of their businesses in resolution. This has involved a wide spectrum of actions, such as service interdependencies mapping, updates of operational contract provisions, solvent wind-down analysis of trading portfolios, and cross-border fire drill testing of contingency arrangements for access to payment clearing.

The HKMA led the regional resolution planning for a G-SIB with its Asia-Pacific headquarters in Hong Kong, organising the Asia CMG meeting and driving the work to enhance resolvability for the G-SIB's Asia resolution group.

In addition, the HKMA participated in the cross-border resolution planning of G-SIBs through its membership in 12 CMGs and other Resolution Colleges. In 2019, the HKMA contributed to the FSB's resolvability assessment processes of these G-SIBs, took part in meetings overseas organised by the relevant home authorities, and worked with these home authorities on initiatives to address impediments to resolvability. In addition, the HKMA hosted some CMGs and Resolution College meetings in Hong Kong.

HKMA's resolution execution capability

The HKMA continued to refine its internal frameworks for effective cross-departmental co-ordination in managing at-risk Als, taking into account implementation experiences and the outcome of crisis simulation exercises.

With the publication of an updated Liquidity Facilities
Framework for Banks in August, work on the design of
liquidity facilities needed to operationalise the resolution
funding arrangements under the FIRO reached a significant
milestone. See "Updated Liquidity Facilities Framework for
Banks" for more details.

In addition, the HKMA published a Quarterly Bulletin article in September on the mechanism set out in the resolution regime for the ex-post recovery of public money, underscoring the authority's intent to recoup, from the wider financial system, public money paid into the resolution funding account and used in a resolution but not repaid on completion of the resolution.

The HKMA made progress with the establishment of a Resolution Advisory Framework and completed the tender process for the Framework, which is designed to enable the Monetary Authority to appoint external advisers efficiently to support the discharging of functions as a resolution authority under the FIRO. It comprises five advisory panels covering broad areas of expertise on legal; financial and valuation analysis; corporate financial advisory; operational review and analysis; and restructuring analysis.

Updated Liquidity Facilities Framework for Banks

Since the global financial crisis in 2008, regulatory reforms have been developed at the global level and implemented in Hong Kong to improve the resilience of banks and reduce systemic risk. In the context of these reforms, central bank liquidity remains a crucial tool in the financial stability toolkit.

Operationalising the provisions in the FIRO for funding in resolution for banks ensures a credible resolution regime. In 2019, the HKMA introduced a new Resolution Facility, which may be deployed in the context of a resolution where the circumstances so warrant, as part of the updated Liquidity Facilities Framework.

At the same time, the HKMA incorporated some refinements to the pre-existing liquidity support arrangements in an updated Liquidity Facilities Framework. It includes the various facilities through which the HKMA may provide banks with temporary Hong Kong dollar liquidity (i.e. not in the nature of capital support), to maintain the integrity and stability of the monetary and financial systems in Hong Kong.

The Framework effectively brings the existing Hong Kong dollar liquidity facilities together, with refinements introduced as appropriate. The Framework includes Settlement Facilities for intraday and overnight repo; Standby Liquidity Facilities, under which banks can access term liquidity against collateral, including liquid securities denominated in major currencies; and a Contingent Term Facility that makes reference to the guiding principles of the previous Lender of Last Resort arrangements and provides lending, at the discretion of the HKMA, against a wide spectrum of collateral in cases of extraordinary liquidity stress.

The updated Liquidity Facilities Framework takes forward a key recommendation in the FSB's 2018 Peer Review of Hong Kong and marks a significant development in the HKMA's ability to respond to both idiosyncratic and systemic liquidity stress.

International policy and stakeholders' engagement

Internationally, the HKMA is actively involved in the implementation of resolution reforms through its membership at the FSB. In the FSB's 2019 Resolution Report: "Mind the Gap", its eighth report on the implementation of resolution reforms, the FSB reports that G-SIBs have been made more resolvable through the build-up of TLAC and other measures, while pointing out the remaining gaps. See "HKMA's Involvement in International Resolution Policy Work in 2019" for more details on the HKMA's involvement in international resolution policy work.

At the regional level, the HKMA participates actively in knowledge sharing and discussions with regional authorities in relation to resolution in a cross-border context. As the Chair and Secretariat of the EMEAP's FMR, the HKMA hosted a resolution workshop of the FMR in Hong Kong in April.

The workshop provided a platform for FMR member authorities to share knowledge on cross-border resolution topics, such as (i) the setting of preferred resolution strategies; and (ii) policies and standards on addressing impediments to the resolvability of banks (please refer to pages 86 and 87 for further information on other EMEAP work).

Locally, the HKMA engages the industry and various external stakeholders actively through meetings with the management of Als, rating agencies, law firms and industry associations. These serve to promote better understanding of the resolution regime in Hong Kong and the implications on Als, their counterparties and investors, and the wider market so as to enhance the credibility of the resolution regime.

HKMA's Involvement in International Resolution Policy Work in 2019

Effective resolution requires internationally harmonised resolution policies and standards, given the cross-border nature of many large financial institutions. This is pertinent to Hong Kong as a material host of all G-SIBs⁶.

To reflect Hong Kong's unique role as a key host jurisdiction of G-SIBs and internationally active banking groups as well as a regional home for the resolution entities of some of these banking groups, the HKMA takes part actively in formulating and implementing international resolution policy standards. The HKMA has been contributing primarily through its membership at the FSB ReSG and the FSB CBCM Working Group for banks. The HKMA also participates in a number of virtual workstreams to help advance implementation work on bail-in execution and continuity of access to FMIs.

An important aspect of the FSB's resolution work is to support timely and consistent implementation, and to evaluate implementation progress made by FSB members. To this end, the FSB's thematic peer review on resolution planning, chaired by the HKMA, published its report in April. The report makes recommendations for the FSB and its member jurisdictions on resolution planning based on the findings of the review.

Further to the FSB report on its technical review of the implementation of the TLAC Standards, FSB members continued to work through the technical issues identified, including strengthening the understanding of home and host jurisdictions' approaches towards the pre-positioning of financial resources. As part of a follow-up to this work, the HKMA participated in an FSB workshop in September which discussed, among other things, cross-border management of capital and liquidity to help strengthen mechanisms and approaches to addressing market fragmentation. The HKMA also acted as the moderator for one of the panels at the workshop.

The HKMA contributed to a number of international discussions related to financial stability, for instance, by sharing its practices on crisis simulation exercises, both domestically and cross-border, to increase preparedness. In 2019, the HKMA participated in nine FSB meetings and workshops, some of which were hosted by the HKMA in Hong Kong.

See https://www.fsb.org/wp-content/uploads/P221119-1.pdf for the 2019 list of G-SIBs.

Bank consumer protection

Code of Banking Practice

The industry's overall compliance with the Code of Banking Practice remains satisfactory. The industry has completed a self-assessment exercise covering 2018. Als' subsidiaries and the affiliated companies controlled by them, which are not Als and are not licensed, regulated or supervised by any financial regulators in Hong Kong, should also observe the Code when providing banking services in Hong Kong, where applicable. According to the self-assessment results, all Als as well as their subsidiaries and affiliated companies reported full or nearly full compliance⁷, while a few Als have taken prompt remedial action to rectify areas of non-compliance.

Consumer protection in the digital age

In the light of the digital age, the HKMA consistently reviews and strengthens consumer protection policy on digital financial services. In order to strike a balance between innovation and consumer protection, Als should adopt a risk-based approach and implement consumer protection measures that are commensurate with the risks involved. In view of the development of innovative technology in banking under the "Open API Framework for the Hong Kong Banking" Sector", the HKMA issued a circular in October to remind Als to adopt adequate consumer protection measures in Open Application Programming Interface (Open API) initiatives, and to clarify that Als are allowed to engage third-party service providers under the Open API Framework as lending intermediaries. The HKMA issued another circular in November to provide Als with a set of guiding principles on the consumer protection aspects of Als' use of big data analytics and artificial intelligence. These guiding principles focus on four major areas, namely governance and accountability, fairness, transparency and disclosure, and data privacy and protection.

In May, the HKMA was awarded the "Best Conduct of Business Regulator in Asia Pacific" at the Asian Banker's Leadership Achievement Awards 2019, as a recognition of the HKMA's conduct supervision efforts in pursuing a consistent and holistic programme to promote consumer and investor protection, including those related to digital financial services.



The HKMA receives the "Best Conduct of Business Regulator in Asia Pacific" award from the Asian Banker.

Financial inclusion

The HKMA, together with the Hong Kong Association of Banks (HKAB), introduced an initiative to extend the online retrieval period of e-Statements to a minimum of seven years, in order to enhance customer experience in the light of the increasing popularity of digital financial services. By the end of the first quarter of 2020, all retail banks offering e-Statements should start to incrementally accumulate over time e-Statements for a cycle period of at least seven years for online retrieval by individual retail customers. The HKMA issued a circular in September to set out the implementation details.

In promoting financial inclusion, the HKMA has encouraged retail banks to pay special attention to customers in need. During the year, a majority of retail banks removed fees previously imposed on low account balances and eliminated other service charges for various types of accounts for individual retail customers to further facilitate access to basic banking services. The industry worked with EPS Company and Hongkong Post to further extend a cash withdrawal service for the elderly, dispensing with the need to make purchases to all 167 Post Offices and Mobile Post offices. This added to the over 300 outlets of convenience store chains which are already providing such a service.

The HKMA has been monitoring the industry's implementation of the Practical Guideline on Barrier-free Banking Services, which sets out measures to facilitate access by customers with physical disabilities, visual impairment, or hearing impairment. The implementation progressed well in the year, showing the industry's commitment in enhancing barrier-free access. For example, over 94% of bank branches were wheelchair accessible, 1,066 voice navigation ATMs were in operation, and assistive listening systems were available at 663 branches.



HKMA's then Chief Executive, Mr Norman Chan (third from left), visits a new bank outlet.

Opening and Maintaining Bank Accounts

The HKMA attaches great importance to the access of banking services by corporates in Hong Kong and works closely with the banking industry and the business community to tackle the associated issues of opening and maintaining bank accounts in Hong Kong.

While financial institutions around the world, including banks in Hong Kong, have generally strengthened their AML/CFT controls in line with international standards, the HKMA has issued guidance to remind banks to apply a risk-based approach to the CDD process at account opening and maintenance, and not to create unreasonable hurdles for legitimate businesses to access banking services. Banks are also required, throughout the CDD process, to maintain proper communication with customers, to be transparent, reasonable and efficient, and to observe the principle of "treating customers fairly".

In response to the HKMA's guidance, the banking industry has introduced various improvement measures for the account opening process. Under the encouragement of the HKMA, some banks have started launching the Simple Bank Accounts (SBAs) service in March and April to provide basic banking services with less extensive CDD measures to eligible corporate customers based on their actual business needs. SBA customers that require more comprehensive banking services in the future may upgrade their accounts to traditional bank accounts by completing the standard CDD process. SBAs offer bank customers another banking option while helping to address the needs of corporate customers at different stages of their development. In April, the HKMA issued a circular encouraging more banks to launch SBAs to provide corporate customers with more choices. Customers' feedback has been positive, suggesting considerable demand for this type of service.

The HKMA completed an MSP, focusing on the customer interface aspect of Als' account opening processes for SMEs and ethnic minority customers, to assess the effectiveness of Als' improvement measures and practices on the ground. The HKMA also completed a thematic review on the application of AML/CFT requirements for the SME segment. The results of the MSP and the thematic review were shared with Als in June through circulars.

To maintain communication with the business community, the HKMA's dedicated Account Opening and Maintenance Team handles and follows up on enquiries and feedback received from the pubic as well as the local and overseas business communities via a dedicated email account (accountopening@hkma.gov.hk) and a hotline (+852 2878 1133).

The HKMA works closely with the industry to promote a greater use of technology, including remote onboarding initiatives, to optimise banks' CDD process and allow customers to enjoy greater transparency and efficiency in the process.

With the concerted efforts of the HKMA and the banking industry, improvements were made in account opening processes and customer experience.

- The retail banking sector opens on average about 10,000 new business accounts per month, of which around 50% involved SMEs and start-up companies.
- The average unsuccessful rate of account opening applications is currently around 5%, representing a significant improvement from around 10% in early 2016.

The HKMA will continue to work with the banking industry, business community, and relevant stakeholders to deal with account opening and maintenance. The HKMA aims to maintain a robust AML/CFT regime in Hong Kong which would not undermine access by legitimate businesses and ordinary residents to basic banking services.

Bank Culture

The HKMA promotes bank culture reform by encouraging Als to foster a sound culture within their institutions through three pillars: (1) governance, (2) incentive systems, and (3) assessment and feedback mechanisms.

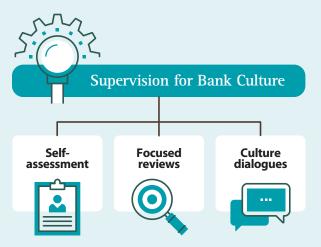
Sound Bank Culture



Supervisory measures on improving bank culture include self-assessment, focused reviews and culture dialogues. Following the announcement of these measures in December 2018, the HKMA started the self-assessment exercise in early 2019 by requiring 30 Als, including all major retail banks and selected foreign bank branches, to assess their own culture enhancement efforts and benchmark themselves against the findings of major conduct incidents outside Hong Kong. The HKMA also reminded the other Als which were not covered in the first phase of the self-assessment exercise to review their own culture enhancement efforts. The HKMA has been going through the Als' self-assessment reports obtained from the first phase to draw insights from the submissions, with a view to providing a range of practices for industry reference, identifying common emerging themes, and informing the HKMA's future work on bank culture supervision.

At the same time, the HKMA began culture dialogues with four Als in 2019. Under this initiative, the HKMA meets with the senior management and/or board members of Als responsible for bank culture to conduct in-depth discussions on the effectiveness of their culture enhancement efforts. The dialogues also give the HKMA an opportunity to provide supervisory feedback, including the observations gathered through the HKMA's ongoing supervision.

During the year, the HKMA continued to engage with the industry in promoting bank culture and maintain dialogue with other regulators on the development of bank culture. The HKMA also attended and spoke at conferences, seminars and events on bank culture.



Engagement of intermediaries by authorized institutions

Various measures were introduced to further protect the interests of bank customers and reduce potential risks to the reputation of the banking industry arising from possible malpractices undertaken by fraudulent lending intermediaries. In particular, the HKMA reminded the public to stay alert to bogus phone calls. Retail banks' hotlines have been widely and effectively used by the public to verify callers' identities, with a total of over 17,000 enquiries received during the year.

Customer complaints relating to debt collection agents employed by authorized institutions

The number of complaints received by Als about their debt collection agents decreased to 32 from 33 in 2018 (Chart 2). The HKMA will continue to monitor Als' engagement with debt collection agents.



Credit data sharing

The HKMA continued to work with the banking industry to follow up on a security incident involving TransUnion, an organisation providing consumer credit reference services, in relation to possible security loopholes in the application procedures for credit reports maintained by the company. In the security incident, which came to light in the fourth quarter of 2018, some personal data on the TransUnion database was allegedly accessed by an unauthorised party. The HKMA and the HKAB have been following up closely with TransUnion on its investigation into the incident, the subsequent comprehensive upgrading of its information security system, and an independent review on the enhanced security controls. In December, the Office of the Privacy Commissioner for Personal Data (PCPD) published an investigation report on the data breach, finding that TransUnion had contravened the data security principle under the Personal Data (Privacy) Ordinance in terms of its online authentication procedures. PCPD directed TransUnion to take remedial action and prevent any recurrence of such contravention. TransUnion's online enquiry services on personal credit reports were suspended throughout 2019.

Deposit protection

The Deposit Protection Scheme (DPS) provides protection to each depositor up to a limit of HK\$500,000 per bank.

To supplement traditional paper cheque payments for DPS compensation, the Hong Kong Deposit Protection Board (HKDPB) undertook a two-year project to implement electronic payment channels. Such payment channels, including the Faster Payment System (FPS), will provide depositors with safe, faster and more convenient access to compensation payment. A payout rehearsal was conducted in November to ensure HKDPB's co-ordination with payout agents and to test the payout operations using the new system. The results have once again attested that making compensation payments to the majority of eligible depositors within seven days is an achievable target.

To tie in with the Year of the Pig, a new "DPS Piggy Bank"-themed advertising campaign and a roving exhibition of piggy bank art pieces were launched to promote public awareness of the DPS. A new board game was developed to disseminate DPS knowledge to lower primary students.

Licensing

At the end of 2019, Hong Kong had 164 licensed banks, 17 restricted licence banks, 13 deposit-taking companies, and 30 AMBs. During the year, the HKMA granted banking licences to eight locally incorporated companies to operate virtual banks, three overseas banks to operate a branch in Hong Kong and one local restricted licence bank to upgrade its authorization status, thereby further enhancing financial inclusion and the diversity of banking services in Hong Kong. The HKMA also granted money broker approvals to six foreign inter-dealer brokers and trading platform operators. The authorizations of three deposit-taking companies were revoked during the year.



Enforcement

Banking complaints

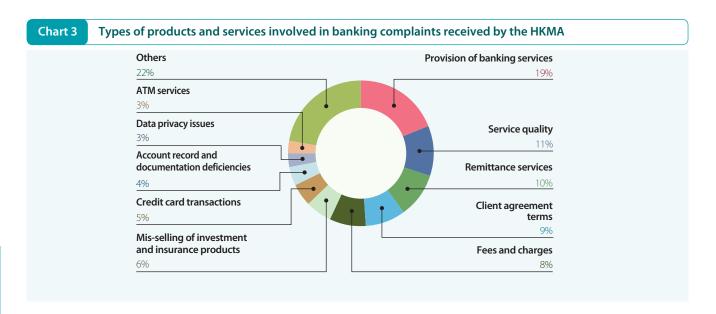
The HKMA received 1,950 complaints against Als and/or their staff members in 2019, and completed the handling of 1,974 cases. At the end of the year, 390 cases remained outstanding (Table 6). In addition, there was a sharp rise in the number of informant reports to the HKMA against Als and/or their staff members, with 493 cases in 2019 compared with 113 cases in 2018. The reports involved mainly alleged data leakage or concerns about certain bank accounts. The HKMA handled each complaint and informant report in accordance with established procedures and followed up on issues of supervisory and disciplinary concern as identified during the handling process.

Table 6	Banking complaints received by the HKMA				
			2019		2018
		Conduct-	General		
		related	banking		
		issues	services	Total	Total
In progress or	n 1 January	97	317	414	456
Received durin	ng the year	215	1,735	1,950	1,948
Completed du	uring the year	(220)	(1,754)	(1,974)	(1,990)
In progress or	n 31 December	92	298	390	414

Issues concerning the provision of banking services, including opening and maintaining bank accounts, make up the most common type of complaint received by the HKMA. Such complaints decreased by 10% over the year from 416 cases in 2018 to 377 cases in 2019, reflecting banks' efforts, based on insights drawn from previous experiences of handling similar cases, to improve transparency and communication with customers concerning decisions that affect their accounts.

Complaints concerning the provision of remittance services increased by 78% over the year to 198 cases, of which quite a number were related to remittance fraud and investment scams, where bank accounts were allegedly used by fraudsters to receive funds from conducting illegal activities.

Complaints about data privacy increased by 34% to 67 cases in 2019. Most of the complaints under this category were allegedly related to excessive collection or suspected leakage of customer data.



Enforcement

To achieve consistent enforcement outcomes and deliver coherent messages to the industry, the HKMA collaborates closely with other financial regulators to investigate or follow up on concerns about possible deviations from compliant, fit and proper conduct arising from banks' self-reports, banking complaints and supervisory examinations of Als' wealth management business.

During the year, a RI was found to be non-compliant with the telephone recording requirements under the Code of Conduct for Persons Licensed by or Registered with the Securities and Futures Commission. Following an investigation and subsequent referral by the HKMA, the SFC took disciplinary action, including a public reprimand and a HK\$2.1 million fine, against the RI in September. As a result of the collaborative enforcement efforts, both authorities were involved in the resolution process and jointly followed up the review report prepared by an independent reviewer engaged by the institution concerned to assess the effectiveness of the remedial actions taken to ensure its compliance with the regulatory requirements.

Meanwhile, regulatory co-operation with the IA was further enhanced following the full commencement of the statutory regulatory regime for insurance intermediaries under the new IO on 23 September. The Monetary Authority, empowered by the IA's delegation of investigation powers under the IO, is the frontline regulator of AIs and their staff licensed under the IO, and is responsible for handling complaints and conducting investigations under the IO in relation to an AI's regulated activities in accordance with collaborative arrangements agreed between the HKMA and the IA. Under the new statutory regime, the IA referred an insurance-related case to the HKMA in September for enforcement follow-up.

Overall, the HKMA's enforcement work resulted in the referral of 39 cases to the SFC during the year for appropriate action. Acting on the HKMA's referral of relevant information, the SFC imposed disciplinary sanctions, including a public reprimand and a pecuniary penalty, on two RIs and three individuals.

Following its assessment and investigation, the HKMA also issued 52 compliance advice letters to Als, SVF licensees, system operators of retail payment systems, as well as their staff members who were found not to have acted in full compliance with the relevant regulatory requirements.

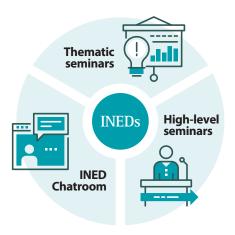
Complaints Watch

The HKMA publishes the Complaints Watch newsletter periodically to promote proper standards of conduct and prudent business practices among Als. The newsletter draws Als' attention to trends in banking complaints, including emerging topical issues on retail payment services and the use of a secured overdraft facility for foreign exchange investment.

Capacity building in the banking sector Director empowerment

In June, the HKMA organised a high-level seminar for Independent Non-Executive Directors (INEDs) and senior bankers in Beijing jointly with the China Banking and Insurance Regulatory Commission. Speakers shared their insights into the developments of Mainland China in areas such as the economy, financial regulations, technologies, and international relations. The HKMA organised thematic seminars to keep INEDs updated on topical issues in the banking sector and to provide a channel for INEDs to exchange views with industry experts and the HKMA. Some of the seminar topics in 2019 were about the latest global crypto trends, the impact of virtual banks, climate risk and finance, and talent risk management. The HKMA also collaborated with the Asia Pacific Loan Market Association and the Alternative Investment Management Association to facilitate the participation of banks in their flagship conferences.

To facilitate closer communication with INEDs, in March the HKMA launched the "INED Chatroom", a customised electronic channel for dialogue between the HKMA and bank directors.



Talent development for banking practitioners

The HKMA works closely with the banking industry and relevant professional bodies to develop new modules under the Enhanced Competency Framework (ECF) to facilitate talent development and enhancement of the professional competencies of banking practitioners. An ECF module on credit risk management which had taken into account feedback from the industry consultation was launched in March. The HKMA is making good progress on developing new ECF modules on operational risk management and compliance.

Since the ECF modules were first rolled out in 2016, about 10,000 banking practitioners had obtained recognised certifications by end-December 2019 to meet ECF benchmarks in various professional areas. This helps the banking industry in raising the overall level of professional competence and meeting the demand for talents.

In 2019, the HKMA conducted the Regulator's Dialogue and other briefing sessions to keep banking practitioners at all levels updated on bank culture supervision and its refined investor protection measures.

This year also saw the graduation of the second batch of apprentices under an apprenticeship programme for private wealth management. The programme was a joint initiative of the HKMA and the Private Wealth Management Association (PWMA) to develop future talent for the industry. In view of the overwhelming response from students and participating private wealth management firms in previous years, the HKMA and the PWMA conducted another round of recruitment in November.



Oversight of financial market infrastructures

The policy objectives of the HKMA in overseeing FMIs are to promote their general safety and efficiency, contain systemic risk, and foster transparency. The HKMA aims to make FMIs more resilient to financial crises and protect the monetary and financial systems in Hong Kong from possible destabilising effects arising from disruption to the FMIs. The approach taken by the HKMA in overseeing the FMIs under its purview is set out in a policy statement published on the HKMA website.

The Payment Systems and Stored Value Facilities Ordinance (PSSVFO) empowers the Monetary Authority to designate and oversee clearing and settlement systems that are material to the monetary and financial stability of Hong Kong, and to the functioning of Hong Kong as an international financial centre. The purposes of the PSSVFO include promoting the general safety and efficiency of the designated clearing and settlement systems: the CMU, the Hong Kong Dollar Clearing House Automated Transfer System (CHATS), the US Dollar CHATS, the Euro CHATS, the Renminbi CHATS, and the Continuous Linked Settlement (CLS) System.

The FPS, launched in September 2018, is an extension of the Hong Kong Dollar CHATS and Renminbi CHATS, and is subject to the HKMA's oversight under the PSSVFO. The PSSVFO also provides statutory backing to the finality of settlement for transactions made through the Hong Kong Dollar FPS and Renminbi FPS by protecting the settlement finality from insolvency laws or any other laws.

One of the functions of the Monetary Authority is to maintain the stability and integrity of the monetary and financial systems of Hong Kong, including the maintenance and development of Hong Kong's financial infrastructure. In this connection, the HKMA is responsible for overseeing the OTC Derivatives Trade Repository ("HKTR"). While the HKTR is not a clearing or settlement system and is thus not designated as such under the PSSVFO, the Monetary Authority will ensure that the HKTR is operated in a safe and efficient manner. It is the policy intention of the HKMA to oversee the HKTR in the same way and to apply, where relevant, the same standards as the designated clearing and settlement systems under its purview. All the designated clearing and settlement systems and the HKTR are treated as FMIs in Hong Kong.

The HKMA oversees local FMIs under its purview through off-site reviews, continuous monitoring, on-site examinations, and meetings with FMIs' management. In doing so, the HKMA adopts international standards in its oversight framework. The Committee on Payments and Market Infrastructures (CPMI) of the Bank for International Settlements and the IOSCO Technical Committee published the Principles for Financial Market Infrastructures (PFMI) in 2012. The PFMI constitutes the latest international standards for the oversight of FMIs, including systemically important payment systems, central securities depositories, securities settlement systems, central counterparties and trade repositories. The requirements under the PFMI are incorporated in the relevant guidelines on designated clearing and settlement systems and trade repositories issued by the HKMA.

The HKMA has completed the PFMI assessments on the FMIs under its oversight. All the FMIs have published Disclosure Frameworks, which is a key requirement under the PFMI to improve transparency by disclosing system arrangements principle by principle. The PFMI assessment results and Disclosure Frameworks are available on the HKMA website.

In the light of heightened cybersecurity risks, the CPMI published guidance on cyber resilience requirements in 2016 and a strategy to mitigate the risk of wholesale payment fraud related to endpoint security in 2018. The HKMA has been working closely with FMIs with a view to complying with the relevant international standards and further strengthening their cybersecurity.

International participation

The HKMA is a member of the CPMI and participates in meetings, working groups and forums on FMI oversight matters. It also participates in the CPMI-IOSCO Implementation Monitoring Standing Group (IMSG), which is responsible for monitoring and assessing the implementation of the PFMI by different jurisdictions.

Throughout the years, the HKMA has participated actively in the PFMI assessments conducted by the IMSG. The assessment reports published by the CPMI-IOSCO confirmed that the HKMA had completed the process of adopting the legislation and other policies related to implementing the PFMI, and that the adopted measures were complete and consistent with the principles and responsibilities. The reports also noted that the FMIs under the purview of the HKMA observed the relevant requirements under the PFMI or the relevant guidelines.

The HKMA is also a member of the Oversight Forum of the global message carrier SWIFT, which discusses relevant oversight matters and shares SWIFT-related information. Hong Kong's Als and FMIs, which commonly use SWIFT's services, may be exposed to risks in the event of any disruption to SWIFT's operations. During the year, the HKMA attended forum meetings and teleconferences to discuss matters of interest, in particular the customer security framework developed by SWIFT and cybersecurity issues.

The HKMA participates in the international co-operative oversight of the CLS System through the CLS Oversight Committee. The CLS System is a global clearing and settlement system operated by the CLS Bank to handle cross-border foreign exchange transactions. It enables foreign exchange transactions involving CLS-eligible currencies, including the Hong Kong dollar, to be settled on a payment-versus-payment (PvP) basis. During the year, the HKMA attended various meetings of the CLS Oversight Committee to discuss operational, development, and oversight matters.

The HKMA has established co-operative oversight arrangements with the relevant authorities, both at the domestic and international levels, to foster efficient and effective communication and consultation, in order to support one another in fulfilling their respective mandates with respect to FMIs. On the domestic front, the HKMA signed a new MoU with the SFC in September to strengthen the co-operative oversight arrangements between the two regulators, taking into account the latest developments in the market. Internationally, the HKMA held discussions with the relevant overseas authorities to further strengthen the cooperative oversight of links between the FMIs in Hong Kong and those overseas. In particular, the HKMA has established co-operative oversight arrangements with overseas regulators for PvP links between the US Dollar CHATS and the Malaysian Ringgit, Indonesian Rupiah and Thai Baht Real Time Gross Settlement systems, and for the various cross-border links between the CMU and its overseas counterparts.

Independent tribunal and committee

An independent Payment Systems and Stored Value Facilities Appeals Tribunal hears appeals against decisions of the Monetary Authority on licensing and designation matters under the PSSVFO. There has been no appeal since the Review Committee, whose members are appointed by the Chief Executive of the Hong Kong Special Administrative Region, reviews processes and procedures adopted by the HKMA in applying standards under the PSSVFO to systems in which the HKMA has a legal or beneficial interest. The Committee assesses whether the HKMA has applied the same procedures to all designated clearing and settlement systems. The Committee held two meetings, and reviewed four regular reports and 36 accompanying oversight activities management reports in 2019. The Committee concluded that it was not aware of any case where the HKMA had not duly followed 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 the report is available on the HKMA website.

PLANS FOR 2020 AND BEYOND



Supervisory focus

Supervision of operational and technology risk

The HKMA will continue to strengthen the capability of the banking sector to address both existing and emerging operational

and technology risks. In 2020, the HKMA will complete a comprehensive review of the CFI to identify possible enhancement to the initiative and will proceed with implementation. The HKMA will also step up the supervision of risks arising from Als' increasing reliance on cloud service providers and conduct examinations to assess Als' IT governance.

Smart banking

The HKMA will monitor closely the operations of and market reactions to virtual banks after they commence business. In particular, the HKMA will devote resources to the supervision of virtual banks' management of risks, particularly technology risk, protection of customer data, and AML/CFT issues. The HKMA will also roll out initiatives to help develop a larger and more diverse Regtech ecosystem.

Supervision of credit risk

Given the uncertainties in the global economic environment and the social events in Hong Kong, the HKMA is conducting a deep-dive review of Als' asset quality to assess whether there are any emerging trends of deterioration. The HKMA will continue to undertake thematic reviews and examinations focusing on Als' credit risk management practices in areas such as lending to large corporates and loan classification and provisioning systems. In addition, as SMEs are generally more vulnerable to the uncertainties stemming from recent global and domestic events, the HKMA will continue to work with the banking industry to support SMEs' financing needs to the extent consistent with prudent risk management principles.

Supervision of liquidity and market risks

The HKMA will continue to focus on the supervision of Als' liquidity and market risk management in 2020. Apart from conducting on-site examinations and thematic reviews of Als' liquidity risk management systems, the HKMA will refine and strengthen its supervisory liquidity stress tests to ensure the banking system is sufficiently resilient to adverse shocks. It will continue to monitor Als' preparation for the transition associated with the interest rate benchmark reform.

Combating money laundering and terrorist financing

In 2020, the HKMA will undertake a range of follow-up work arising from the FATF ME Report, including working with the Government and other agencies to contribute to the next Hong Kong ML/TF Risk Assessment, which is due for completion in 2021. This will include contributing to the ML/TF risk assessments on higher-risk areas, including overseas corruption and tax crime.

Enabling Als to use Regtech for AML/CFT purposes will be a key supervisory area of focus in 2020. Further to the positive development of remote onboarding initiatives, the HKMA continues to explore how data and technology can be leveraged in innovative ways to enhance Hong Kong's AML/CFT ecosystem. The HKMA will maintain the positive momentum generated through the AML/CFT Regtech Forum by focusing on assisting banks in reviewing AML/CFT processes end-to-end for Regtech adoption; facilitating experimentation with technology innovation in areas such as transaction monitoring and screening; while also enhancing the collective ability of the industry to reduce the risk of ML networks by enhancing data, analytics, information delivery and collaboration, as well as skills and expertise. The HKMA will also undertake a thematic review of Als' transaction monitoring systems, working with a leading global technology firm.

Supervision of wealth management and MPFrelated businesses

The HKMA will continue to communicate closely with other regulators and the banking industry to provide guidance on regulatory standards in relation to the sale of investment and insurance products, and work with the industry to formulate regulatory requirements on conduct standards for trust services. Further to the announcement in November to explore the establishment of a cross-boundary wealth management connect scheme, the HKMA will work with relevant authorities and the banking industry on the operational details for the scheme. Moreover, the HKMA will collaborate with the SFC in conducting joint examinations of RIs and licensed corporations, and co-operate with the IA on the supervision of licensed insurance intermediaries.

The HKMA will carry out on-site examinations and off-site surveillance of Als' conduct in the sale of securities, MPF and other investment and insurance products, including equity-linked products, accumulators, debt securities, investment funds, non-investment-linked long-term insurance and medical insurance products, and of Als' compliance with new regulatory requirements.

Implementation of Basel Standards in Hong Kong

Capital standards

The legislative process to amend the BCR for implementing the SA-CCR and CCP standard is expected to finish within the first half of 2020. To facilitate implementation, the HKMA will develop guidance to help Als better understand the application of certain provisions in the BCR related to the SA-CCR.

Regarding the implementation of the EIF standard, industry consultation on the proposed amendments to the BCR will continue.

The HKMA intends to consult the industry sometime within 2020 on its policy proposals for implementing the Final Basel III package. The policy proposals are being developed as informed by the results of the local QIS conducted in 2019, and will cover the revised IRB approach, the revised standardised approach for credit risk, the revised operational risk framework and the output floor. The finalised policy proposals will then form the basis for the preparation of draft rules for implementing these standards.

In 2019, the HKMA consulted the industry on the proposed approaches to implement the revised market risk standards as set out in the "Minimum capital requirements for market risk" issued by the Basel Committee. The HKMA will be working on a set of amendments to the BCR for the implementation of the revised standards.

With regard to credit valuation adjustment (CVA) risk, the Basel Committee issued a consultative document on the final revisions to the CVA framework on 28 November. The HKMA will consult the industry on its implementation proposal for Hong Kong after the finalisation of the CVA framework by the Basel Committee.

Leverage ratio

In June 2019, the Basel Committee released a revised leverage ratio treatment of client cleared derivatives and disclosure requirements to address any potential window-dressing behaviours of banks to elevate disclosed leverage ratios through temporary reductions in the volumes of certain short-term transactions. The HKMA will develop the relevant policy proposals for implementing the revised treatment, and a number of technical revisions to the leverage ratio as set out in the Final Basel III package, for consultation with the industry.

Disclosure standards

In December 2018, the Basel Committee released the "Pillar 3 Disclosure Requirements — Updated Framework" to incorporate revisions to the Pillar 3 framework, mainly to reflect requirements arising from the Final Basel III package. These requirements constitute the third and final phase of the revised Pillar 3 disclosure requirements. The HKMA will consult the industry on its proposed approach to implementing these requirements.

Development of Supervisory Policies

Other supervisory policies and risk management guidelines

To reflect developments in related regulatory requirements and international standards, the HKMA plans to update certain SPM modules, including those on "Foreign Exchange Risk Management", "Overview of Capital Adequacy Regime for Locally Incorporated Authorized Institutions", "Systemically Important Banks" and "Non-centrally Cleared OTC Derivatives Transactions — Margin and Other Risk Mitigation Standards". The HKMA will continue to work on the revised SPM modules on "Recovery Planning", "Guideline on a Sound Remuneration System" and "Reporting Requirements Relating to Authorized Institutions' External Auditors under the Banking Ordinance", with an aim to finalise the revisions within 2020.

Review of supervisory documents

The review of supervisory documents will continue in 2020 to enhance the user-friendliness of the documents by refining their structure, classification, and drafting styles and by enabling smart display via electronic channels.

Compliance with regulatory regime for over-the-counter derivatives market

The HKMA will continue to monitor Als' and AMBs' compliance with the regulatory regime for the OTC derivatives market in accordance with the statutory requirements.

Balanced and responsive supervision

The HKMA will continue to work closely with the banking industry to refine and streamline supervisory policies and practices to ensure that they remain effective and proportionate amid the changing landscape of risk environment, technology, and customer experience.

Accounting standards

Further to the first-phase amendments issued in September 2019 to provide relief from potential effects of the uncertainties caused by the interest rate benchmark reform, the International Accounting Standards Board is currently assessing the financial reporting issues that may arise when an existing interest rate benchmark is replaced with an alternative reference rate. In respect of IFRS 9, the Basel Committee has been assessing the longer-term implications of the required ECLs under the accounting standard on the regulatory capital framework. Meanwhile, the HKMA will

continue to monitor the updates in accounting standards in response to interest rate benchmark reform and the implementation of IFRS 9 by Als in Hong Kong. The HKMA will maintain regular dialogue with Als' external auditors and assess the implications of other impending accounting standards on the existing prudential requirements on Als.

Green and sustainable banking

The HKMA will continue promoting green and sustainable banking. In 2020, the HKMA will proceed to Phase II under its three-phased approach to set supervisory expectations and requirements. The "greenness" assessment on individual Als will be conducted. Thematic reviews of selected Als' actual practices in managing climate risks will also be performed. Studies on potential obstacles to the development of green and sustainable banking in Hong Kong will be conducted. The HKMA will also continue to participate in the Central Banks and Supervisors Network for Greening the Financial System to share experiences and co-ordinate efforts on the international front to tackle climate change-related risks.

To better inform the industry of the HKMA's expectations and gather its views, the HKMA plans to issue a paper illustrating its supervisory expectations and approaches to green and sustainable banking.

Resolution

The HKMA will continue its work in the multi-year programme of building an operational resolution regime for Als. For 2020, the HKMA will prioritise the following topics within its three core purposes (see Table 7 for details).

Table 7 HKMA's forward priorities on resolution in 2020				
Resolution Standards	Resolution Planning	International Policy, Stakeholders' Engagement and Execution Capability		
 Prepare and consult on draft rules governing contractual stays Consult on and finalise a CoP chapter 	◆ Advance bilateral resolution planning programmes with D-SIBs, assessing resolvability and working with banks to address impediments	 Continue to contribute to international policy developments Chair and provide a secretariat 		
about Als' standards on operational continuity in resolution	to an orderly resolution	function for the EMEAP's FMR		
 Develop a CoP chapter on Als' liquidity reporting and estimation capabilities for consultation 	◆ Advance implementation of LAC requirements for D-SIBs and prepare implementation of operational continuity in resolution standards	◆ Advance the development of local mechanics to execute bail-in and transfer stabilization options		
 Begin work on a CoP chapter about Als' standards on continuity of access to FMIs 	◆ Engage with locally incorporated Als other than D-SIBs, with total consolidated assets above HK\$300 billion, on core information required for resolution planning	 Advance the development and enhancement of crisis management framework 		
	◆ Co-ordinate with relevant home authorities on cross-border resolution planning for G-SIBs via CMGs and Resolution Colleges			

Bank consumer protection

The HKMA will continue to promote good banking practices by participating in, and providing advice to, the Code of Banking Practice Committee of HKAB. In particular, in the light of the increasing trend of digitalisation of financial services, the HKMA will keep the requirements related to consumer protection under review, including provisions in the Code, and consider whether any revisions or new requirements are needed. It will continue to monitor Als' compliance with the Code through various means, including via Als' self-assessment and handling of relevant complaints against them.

The HKMA will continue to work closely with the banking industry in promoting a sound bank culture. The HKMA will keep track of the progress of bank culture reform in Hong Kong and share industry-wide insights and practices on culture with the industry. The HKMA will also continue to explore other culture initiatives, taking into account its overseas experience while maintaining dialogue with overseas regulators on the development of bank culture.

The HKMA will continue to work closely with HKAB in following up with TransUnion on the investigation and enhancement to security controls being undertaken by TransUnion. Drawing insights from the security incident in 2018, the HKMA will work further with the banking industry on enhancing the oversight of credit referencing in Hong Kong, and on introducing more than one credit referencing agency locally, with a view to raising the quality of service and addressing the operational risk of having only one agency in the market.

Financial inclusion

The HKMA will continue to work with the banking industry, business community and relevant stakeholders to further enhance customer experience in account opening and maintenance. The HKMA will carry on its work with the banking industry on remote onboarding initiatives and explore further enhancement of the efficiency and effectiveness of CDD processes through the greater use of technology.

The HKMA will also continue to monitor the industry's implementation of measures recommended in the Practical Guideline on Barrier-free Banking Services.

Deposit protection

The project to implement electronic payment channels for DPS compensation will continue in 2020, with a view to launching the channels in 2021. The compliance programme that monitors DPS member banks' readiness in submitting data and information in accordance with the Information System Guideline will continue. Annual self-assessments and on-site examinations will continue to be conducted to ensure that DPS member banks make appropriate representations to depositors in respect of the protection status of deposits. Multimedia advertising and new segment-focused consumer campaigns will be rolled out to enhance public confidence in the DPS.

Enforcement

The HKMA will continue to deploy the full range of supervisory and enforcement measures to achieve the objectives of market integrity and bank consumer protection. The HKMA will enforce requirements under various statutory regimes relevant to Als and SVF licensees, with a continued focus on proportionate and graduated enforcement action under the Anti-Money Laundering and Counter-Terrorist Financing Ordinance, and on appropriate follow-up action in relation to conduct that prejudices customer interests. We will continue to maintain close collaboration with other local financial regulators to achieve effective and co-ordinated enforcement outcomes.

Capacity building in the banking sector Director empowerment

Having collected positive feedback on the activities held throughout the year to equip directors for discharging of their roles and responsibilities, the HKMA will continue such activities to further empower directors.

Talent development for banking practitioners

The HKMA will also continue its efforts in the ongoing talent development of banking practitioners, such as organising the Regulator's Dialogue and sharing sessions to keep them abreast of banking-sector developments, and collaborating with the banking industry and relevant professional bodies to develop new ECF modules that will cater to industry needs.

Future banking

In view of the talent challenge brought about by new technologies and business opportunities, the HKMA has engaged the banking sector in an industry-wide exercise to identify future talent gaps in the sector over the next five years from 2021 to 2025. The exercise aims to provide recommendations on the direction to take so as to narrow the gaps. It is a good start in facilitating collaborative efforts in the banking industry to make the workforce ready for the future. The HKMA targets to share the findings and recommendations of the exercise in 2020.

Oversight of financial market infrastructures

The HKMA will continue to promote the safety and efficiency of the FMIs under its oversight in accordance with the PSSVFO and the PFMI, and fine-tune the FMI oversight framework taking into account the latest developments.

The HKMA will work with the FMIs on their observance of the PFMI. Assessments will be conducted and updated as required, and the HKMA will continue to participate in the CPMI-IOSCO PFMI implementation monitoring and assessment exercise. Where appropriate, oversight requirements will be strengthened to reflect international practices or in response to market developments. In particular, the HKMA will focus on the cyber resilience of the FMIs under its purview. The HKMA will also continue to work with relevant authorities to further strengthen co-operative oversight arrangements where appropriate.