The banking sector in Hong Kong continued to be resilient in 2022, despite the uncertain and challenging macro-environment, and heightened volatilities in the financial markets. During the year, the HKMA stepped up the supervision of authorized institutions' credit and market risk management. The HKMA also worked closely with authorized institutions to enhance their operational and cyber resilience in light of escalating cyber threats and accelerating digital transformation in the banking sector.

On conduct supervision, the HKMA stepped up consumer protection in respect of "Buy Now, Pay Later" products, and introduced an additional payment arrangement for property refinancing. The HKMA also worked with fellow regulators on a regulatory framework for sustainable development of virtual assets, streamlined the investment product selling process and introduced a new regulatory regime on trust business. The Credit Reference Platform under the Multiple Credit Reference Agencies Model for consumer credit data was launched, and a new mandatory reference checking scheme was introduced to tackle the "rolling bad apples" phenomenon. Meanwhile, the HKMA helped facilitate the reactivation of bank accounts amid travel restrictions under the pandemic.

Following the updated Hong Kong money laundering and terrorist financing risk assessment, the HKMA worked with banks to strengthen Hong Kong's anti-money laundering and counter-financing of terrorism (AML/CFT) ecosystem through public-private partnerships, including the Fraud and Money Laundering Intelligence Taskforce, and enhance the response to scams. In addition, the HKMA worked with strategic partners to better understand and manage risks and vulnerabilities amid an increasingly complex geopolitical environment. Further efforts were made to promote the use of data and technology through the AML Regtech Lab series while accelerating the adoption of supervisory technology in the HKMA's AML work. Internationally, the HKMA participates actively in the work of the Financial Action Task Force.

In 2022, good progress was made on implementing international supervisory standards locally, including those on capital adequacy and disclosure. In addition, notable efforts were also made in the area of soft infrastructure, including working with the banking industry to build a sustainable pipeline of future talents and to upskill existing practitioners. Throughout the year, the HKMA worked closely with the banking industry in refining and streamlining supervisory policies and processes.

The HKMA also continued to advance its local and international work to ensure a credible resolution regime. In particular, a new resolution standard was developed, a regional crisis simulation exercise was conducted, and a new layer of loss-absorbing capacity resources was built up at all domestic systemically important banks, representing a milestone in enhancing resolvability.





### **Objectives**

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

Banks can affect the stability of the system through the way they carry out their business and, in extreme cases, by failing in a disorderly manner. The Monetary Authority, as a supervisory authority, plays a key role in safeguarding financial stability by ensuring that banks are resilient to shocks and 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 and 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 Hong Kong prudential regulatory framework is not 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 Al 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, among other types of institutions. To operationalise the resolution regime in Hong Kong, it is important to lay down resolution rules 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.

The Monetary Authority is also responsible for the designation and oversight of certain financial market infrastructures (FMIs). In overseeing FMIs, the HKMA aims to promote their general safety and efficiency, limit systemic risk and foster transparency. Making FMIs more resilient protects the monetary and financial systems in Hong Kong from possible destabilising effects arising from disruption to the FMIs.

#### Review of 2022

#### Licensing

At the end of 2022, Hong Kong had:



During the year, the HKMA granted money broker approval to six foreign trading platform operators. The authorizations of five licensed banks and one restricted licence bank were revoked during the year.

More information about the Als and local representative offices in Hong Kong can be found in the Annex and Tables D to F on pages 283 to 286 and 292 to 295 respectively.



#### Overview of supervisory activities

In 2022, 183 off-site reviews were conducted covering a broad range of issues, including CAMEL rating assessment<sup>1</sup>, corporate governance, risk management and financial technology (fintech) adoption. As part of the HKMA's continued efforts to promote stronger risk governance, 36 meetings were held with the boards of directors, independent non-executive directors or board-level committees of Als. Furthermore, 38 tripartite meetings were held among the HKMA, Als and their external auditors.

Apart from off-site activities, the HKMA conducted regular on-site examinations on a wide range of Als' activities.

Credit risk management was a key focus from a prudential

supervision perspective, while the management of operational risk and technology risk was another major focus amid the growing adoption of technology by banks. Meanwhile, a round of thematic examinations focused on climate risk management was also conducted amid the rapid development of green and sustainable banking in Hong Kong. On conduct supervision, on-site examinations in securities, investment products, insurance and Mandatory Provident Fund (MPF)-related businesses were carried out, supplemented with thematic reviews on areas assessed to be of higher risk.

Table 1 contains a summary of the HKMA's supervisory activities in 2022.

#### Table 1 Summary of supervisory activities

	2022	2021
1 Off-site reviews and prudential interviews	183	189
2 Meetings with boards of directors, independent non-executive directors or		
board-level committees of Als	36	40
3 Tripartite meetings	38	38
4 Culture dialogues	7	7
5 On-site examinations	112	135
Operational risk and technology risk management	32	45
AML/CFT controls	13	20
Liquidity risk management	8	11
Implementation of Basel capital adequacy framework	3	9
Capital planning	6	4
Market risk, counterparty credit risk and treasury activities	19	19
Securities, investment products, insurance and MPF-related businesses	17	12
Consumer protection	2	3
Deposit Protection Scheme-related representation	12	12
Overseas examinations	0	0
6 Thematic reviews	579	733
Credit risk management and controls	43	42
Operational risk and technology risk management	69	85
AML/CFT controls	82	71
Model Risk Management	7	7
Sale of investment, insurance and MPF products	115	266
Consumer protection <sup>a</sup>	225	236
Liquidity risk	21	16
Market risk	8	10
Green and sustainable banking	9	0
Total	955	1,142

a. Including self-assessments by Als of compliance with the Code of Banking Practice.

Comprising the Capital adequacy, Asset quality, Management, Earnings and Liquidity components.



#### Credit risk

#### Credit growth and asset quality

Total loans decreased by 3.0% in 2022, compared with a growth of 3.8% in 2021. Table 2 shows the breakdown of growth in loans and advances. Mainland-related lending also decreased by 4.4% to HK\$4,522 billion in 2022 (Table 3).

During the year, the banking sector was buffeted by challenges from various fronts, including the fifth wave of COVID-19 infections, rising geopolitical tensions, aggressive rate hikes by major central banks and worsening financial conditions of certain Mainland property developers. Despite these challenges, the banking sector remained stable and resilient.

The asset quality of the banking sector deteriorated during the year but remained at a healthy level. The classified loan ratio of the industry was 1.38% at the end of 2022, up from 0.89% at the end of 2021. The classified loan ratio for Mainland-related lending increased to 2.21% from 0.89% a year ago.

Over the year, the HKMA enhanced the breadth and depth of its risk surveillance, and maintained close communication with Als to facilitate up-to-date assessment of the impact of economic and market developments as well as the adequacy of Als' risk management measures. The overall credit risk facing the banking sector remained manageable. The results of the HKMA's solvency stress tests indicated that the banking sector continued to maintain sufficient capital buffers to withstand extreme stress.

Targeted and thematic examinations were conducted during the year to evaluate Als' credit risk management focusing on asset quality, exposures to vulnerable sectors, oversight of credit risks at branches outside Hong Kong, and collateralised lending to private banking and wealth management customers.

Meanwhile, as more corporates ran into financial difficulty against the challenging macroeconomic backdrop, the HKMA encouraged Als to follow the principles under the "Hong Kong Approach to Corporate Difficulties" in dealing with corporates encountering repayment problems, so that individual Als acted collaboratively in the common interest of the lenders involved.

#### Table 2 Growth in loans and advances

% change	2022	2021
Total loans and advances	-3.0	3.8
Of which:		
– for use in Hong Kong	0.9	4.3
– trade finance	-13.5	14.2
– for use outside Hong Kong	-10.2	1.4

#### Table 3 Growth in Mainland-related lending

% change	2022	2021
Total Mainland-related lending	-4.4	3.7
Of which:		
<ul> <li>Mainland-related lending</li> </ul>		
(excluding trade finance)	-3.6	2.6
– trade finance	-14.8	20.7

## Alleviating cash flow pressure faced by customers

The HKMA and the Banking Sector Small and Medium-sized Enterprise (SME) Lending Coordination Mechanism extended the Pre-approved Principal Payment Holiday Scheme until the end of July 2023, given the difficult operating environment for corporates in the wake of the fifth wave of COVID-19 infections and continued uncertainties surrounding the external and domestic economy. To help customers prepare for an eventual resumption of normal repayment, a partial principal repayment option under the Scheme was introduced and subsequently enhanced.

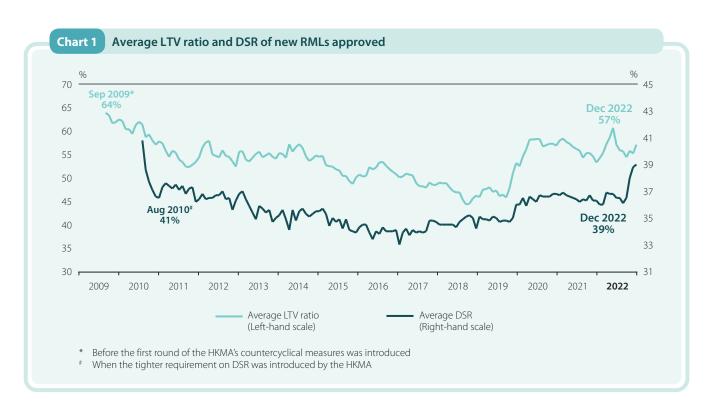
By the end of 2022, banks had approved loan tenor extensions and other forms of relief in over 108,000 cases, involving an aggregate amount of over HK\$1.1 trillion. For personal customers, banks had approved more than 81,000 cases of principal payment holidays for residential mortgages and other personal relief loans, amounting to over HK\$65 billion.



#### **Property mortgage lending**

The successive rounds of countercyclical macroprudential measures introduced by the HKMA since 2009 have strengthened banks' risk management and the banking sector's resilience to a possible abrupt downturn in the local property market. The average loan-to-value (LTV) ratio of new residential mortgage loans (RMLs) approved in December 2022 was 57%, compared with 64% in September 2009 before the countercyclical measures were first introduced. The average debt servicing ratio (DSR) of new mortgages remained low at 39% in December 2022, compared with 41% in August 2010, when a cap on DSR was first applied (Chart 1).

In September, the HKMA lowered the stress testing requirement for property mortgage lending from a 300-basis point increase in interest rate to a 200-basis point increase. The decision was made taking into account factors including the prevailing interest rate environment, the trend of mortgage rates and their long-term historical average. This level was considered to be sufficiently prudent from the perspective of effective risk management of banks' property lending business.





#### Operational and technology risk

A number of initiatives were taken to strengthen the operational resilience of the banking sector over the year.

A new Supervisory Policy Manual (SPM) module on "Operational Resilience" was issued in May to set out the HKMA's supervisory expectations with respect to the governance and control framework that Als should maintain to become operationally resilient. Two industry dialogues were organised to promote understanding of the new standards and to facilitate experience sharing within the industry (Figure 1).

The HKMA also provided detailed supervisory guidance on specific areas of banking operations, including customer data protection, payment system operations, cloud computing, payment card security and anti-distributed denial of service (anti-DDoS) protection.

In light of the evolving cyber threat landscape, the HKMA sought to enhance the cyber resilience of the banking sector by promoting the adoption of a secure tertiary data backup arrangement, monitoring Als' implementation of the Cyber Resilience Assessment Framework 2.0 and evaluating the effectiveness of banks' management of cyber risks arising from supply chain attacks.

In response to heightened risks of phishing scams and other online fraud, in September the HKMA and the Hong Kong Association of Banks (HKAB) jointly launched a new public awareness campaign with the slogan "Protect your Personal Digital Keys; Beware of Fraudulent Links!". In July, a workshop was also organised together with the Hong Kong Police Force to update banks on the latest modus operandi of fraudsters.



Poster for the public awareness campaign themed "Protect your Personal Digital Keys; Beware of Fraudulent Links!"

Figure 1

Industry dialogue "Journey to Operational Resilience"



#### <u>Key Considerations When Developing Operational</u> Resilience Standards

- **1. Regulatory harmonisation** align with international standards and ensure compatibility with major overseas jurisdictions
- 2. Risk-based and flexible supervisory requirements to accommodate the wide range of institutions operating in Hong Kong
- **3.** "Building block" approach leverage on and gel together existing risk management components to minimise compliance burden

The HKMA welcomes discussions with the industry or individual institutions on a bilateral basis





Mr Raymond Chan (top right), Executive Director (Banking Supervision) of HKMA, discusses with the industry in one of the industry dialogues



#### Liquidity and market risk

The HKMA stepped up its surveillance of banks' market and liquidity risk exposures amid the heightened market volatilities brought about by the aggressive tightening of monetary policies amongst the major economies. The HKMA conducted reviews to assess the adequacy of Als' liquidity risk management, focusing on systems and controls for funding diversification and intragroup liquidity risk management. Examinations were also carried out to evaluate the effectiveness of Als' market risk management frameworks and operational controls over treasury activities.

#### Anti-money laundering and counterfinancing of terrorism

In 2022, the HKMA's priority was to respond swiftly to increases in online fraud, mule account networks and other financial crimes. Through active participation in the Fraud and Money Laundering Intelligence Taskforce (FMLIT)<sup>2</sup>, the HKMA strengthened collaboration with the 23 member banks, enhancing their capacity to detect and prevent illicit activity. This helped increase the number of intelligence-led suspicious transaction reports by 319% compared with 2021, leading to the identification of 6,819 new suspicious accounts associated with crimes under investigation by law enforcement agencies, and more than HK\$120 million of criminal proceeds restrained or confiscated. In parallel, the number of banks collaborating with the Anti-Deception Coordination Centre (ADCC)<sup>3</sup> increased from 15 to 23, resulting in the interception of HK\$1.2 billion in suspected fraudulent payments. The HKMA also worked closely with the banking and stored value facility (SVF) sectors to support the launch of "Scameter", an anti-fraud search engine operated by the Hong Kong Police Force, which prevented an estimated HK\$1.3 billion in fraud losses to the public since its launch in late September. To raise public awareness of fraud and mule accounts, the HKMA has encouraged banks to double down on publicity efforts, issued social media posts and posted five videos on the HKMA's "Don't Lend/Sell Your Account" web page to share good practices by bank staff to help customers avoid losses from fraud (Figure 2).

## Figure 2 Raising public awareness of fraud and mule accounts





Educational messages on social media reminding the public "Don't be tempted by quick money. Don't sell your account" and outlining good practices by bank staff to help customers avoid losses from fraud

The HKMA engaged the banking industry on the amendments to the Anti-Money Laundering and Counter-Terrorist Financing Ordinance, which will come into effect in June 2023. Changes relevant to banks include introducing a licensing and regulatory regime for virtual asset service providers; adopting an amended definition of "politically exposed person" (PEP) to align with the Financial Action Task Force (FATF) requirement; facilitating a risk-based approach to determining the degree of customer due diligence (CDD) for PEPs; and supporting the use of technology by clarifying that a recognised digital identification system can be used for CDD and to satisfy the additional requirements where a customer is not physically present.

The FMLIT is a public-private partnership for information sharing among the HKMA, the Hong Kong Police Force and banks. Established in May 2017, the FMLIT expanded membership from 10 banks initially to 23 banks.

The ADCC was established in July 2017 by the Hong Kong Police Force to combat deception and enhance public awareness of various kinds of scams.



Under the "Fintech 2025" Strategy, the HKMA supported the adoption of AML/CFT regulatory technology (Regtech). Two further sessions in the AML Regtech Lab (AMLab) series<sup>4</sup> were held in July and November, in collaboration with Cyberport, focusing on low-barrier and easy-to-implement technologies and network analytics.

The adoption of network analytics is progressing well, with more than twice as many retail banks deploying the capability as there were three years ago, including banks that participated in the first AMLab and have partnered with technology companies housed at Cyberport (Figure 3).

Figure 3 Collaboration with Cyberport to deliver a digital response to fraud

\*\*\* IMMA'S AMLAB 3 with Cyberport:
A digital response to fraud

60% of retail banks now deploy network analytics

+127% banks' identification & reporting of suspicious accounts

+166% criminal proceeds restrained by law enforcement

To remain responsive to changes in money laundering and terrorist financing (ML/TF) risks globally and domestically, the HKMA continued to improve its data and technology capabilities. Deployment of an Intelligent Risk and Incident Scanning horizon-scanning tool, automation of regulatory reporting of financial crime risk information from banks and investment in data science (including analytics and visualisation tools) have enhanced the way the HKMA delivers its mandate, focusing supervisory resources on higher-value activities to provide greater insights into ML/TF risks.

During the year, the HKMA completed 13 risk-focused on-site examinations, including thematic work on transaction monitoring, proliferation financing and terrorist-financing screening systems. The HKMA also undertook 82 desk-based reviews and assessments, including thematic reviews on the network analytics capabilities of six FMLIT banks and the effectiveness of Als' and SVF licensees' controls. To support a collaborative approach, the HKMA provided training and shared knowledge of its AML/CFT role and capabilities during 18 engagements with local and international partners, including financial crime seminars in Hong Kong and Singapore on data analytics, sharing sessions with overseas regulators on the HKMA's deployment of Suptech and contributions to financial investigation training courses for the Hong Kong Police Force and the Independent Commission Against Corruption.





Ms Carmen Chu (left photo), Executive Director (Enforcement and AML) of HKMA, provides opening remarks at the second AMLab.

A new feature, Regtech Connect, is also launched, in which technology companies housed at Cyberport demonstrate and discuss relevant Regtech capabilities with participating banks

The AMLab was launched in 2021.

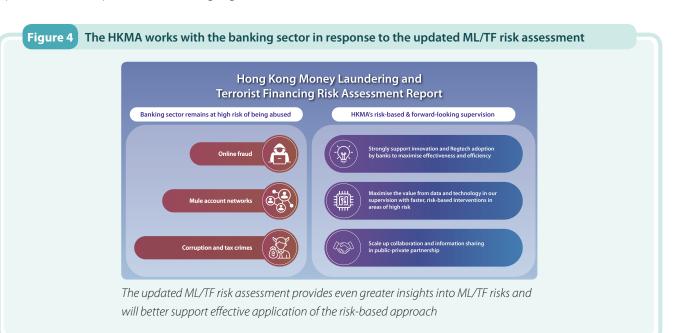


In July, the Government published the second *Hong Kong Money Laundering and Terrorist Financing Risk Assessment Report* (Figure 4). The HKMA collaborated closely with the banking and SVF sectors to support this important exercise, contributing to improved understanding of extant and emerging risks and helping to support more effective risk-based decision-making in both sectors.

In December, the HKMA hosted an AML seminar for the banking and SVF sectors covering subjects including regulatory updates and source of wealth requirements, and providing feedback on suspicious transaction reporting and updates on counter-proliferation financing (Figure 5).

## Wealth management and MPF-related businesses

The HKMA co-operates closely with other financial regulators in Hong Kong to provide guidance on and supervise Als' practices in the sale of securities, investment products, insurance products and MPF schemes. The HKMA 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.







The HKMA conducted 17 on-site examinations, 115 thematic reviews and 26 analyses of surveys and returns of Als, covering the sale of investment, insurance and MPF products. These focused in particular on investment products related to corporates of high indebtedness, virtual assets (VAs), non-investment-linked long term insurance products and Cross-boundary Wealth Management Connect (Cross-boundary WMC) business. The HKMA and the Securities and Futures Commission (SFC) completed a concurrent thematic review on intermediaries' distribution of non-exchange traded investment products. In addition, the HKMA and the SFC announced the findings of the second annual joint survey on the sale of non-exchange traded investment products, which provided useful information on the industry landscape and market trends.

The VA landscape evolved massively during the year. The HKMA adopted the "same activity, same risks, same regulation" principle, and aimed to put in place timely and necessary quardrails, so that VA activities can develop in Hong Kong in a sustainable manner, while the associated risks can be mitigated and managed in line with international standards. For that, the HKMA actively participated in the work of international for regarding the possible regulation of VA activities. In January 2022, the HKMA issued a joint circular with the SFC to provide updated guidance to intermediaries concerning a range of VA-related activities to accord protection to customers. The HKMA also stepped up supervision on Als' VA-related intermediary activities, and enhanced investor education through social media and in collaboration with the Investor and Financial Education Council.

To bring growth opportunities to the banking and wealth management industries in Hong Kong, the HKMA maintained close dialogues with Mainland authorities and other stakeholders to explore enhancements to the Cross-boundary WMC scheme. The HKMA announced in January that five additional banks in Hong Kong were eligible to offer Crossboundary WMC services, and handled a number of banks' applications for additional partnerships and/or expansion of the service scope during the year. The HKMA has been monitoring the participating banks to ensure smooth implementation of the scheme. Furthermore, to enhance regulation and supervision of the trust business in Hong Kong with a view to enhancing confidence in Hong Kong's private wealth management business, the HKMA issued in May the Code of Practice for Trust Business and a new SPM module for implementing the Code.

The HKMA continued engagement with the industry on the selling process of investment products. In light of market developments and industry feedback, in October the HKMA updated the requirements on the sale and distribution of loss-absorption products and issued guidance to facilitate registered institutions' (RIs) suitability assessments in respect of customers' investment horizon and concentration risk. The HKMA also conducted a special thematic review of some RIs' selling processes of investment products with a view to sharing observations to encourage banks to streamline the selling process and enhance customer experience.

Following the publication in 2021 of the key observations of a joint inspection of the HKMA and the Insurance Authority (IA) on premium financing, the HKMA, in close collaboration with the IA, issued in April 2022 guidance on supervisory standards and requirements applicable to Als when they act as licensed insurance intermediaries or premium financing facility providers, so as to enhance the protection to customers involved in premium financing. In July, the HKMA issued a circular to provide guidance to Als on the selling of protection linked plans, a new subset of investment-linked assurance scheme products introduced in late 2021. Moreover, the IA, the Mandatory Provident Fund Schemes Authority and the HKMA completed their first-ever joint mystery shopping programme and issued a joint circular in December to outline the key findings and good practices of intermediaries in the sale of Qualifying Deferred Annuity Policies and MPF Tax-deductible Voluntary Contributions. The HKMA also continued to work closely with the IA to extend the temporary facilitative measures under the pandemic and provide further facilitative measures for non-face-to-face distribution of insurance products.

During 2022, the HKMA processed two applications from virtual banks for registration as an RI and one application for addition of a regulated activity under the Securities and Futures Ordinance (SFO), as well as four applications (two of which from virtual banks) to become licensed insurance intermediaries and for varying their lines of businesses under the Insurance Ordinance. The HKMA also granted consent to 211 executive officers responsible for supervising the securities activities of RIs and conducted background checks on 7,238 individuals whose information was submitted by RIs for inclusion in the Register of Securities Staff of AIs maintained by the HKMA.

#### Other supervisory activities

The Banking Supervision Review Committee<sup>5</sup> considered seven cases in 2022. Five concerned the approval of money brokers. The remaining two were related to the three-tier banking system and virtual banks (Table 4).

During the year, the HKMA commissioned eight reports under section 59(2) of the Banking Ordinance (BO), requiring Als to appoint external professional firms to report on the effectiveness of their controls in specified areas of operation. These reports covered risk management, the institutions' overall risk governance frameworks, and other areas such as compliance with the BO, AML/CFT controls and system stability.

In 2022, there were no incidents reported by Als involving breaches of the requirements in the BO relating to capital adequacy or liquidity ratio. There were 57 breaches of other provisions of the BO, mostly related to Als' reporting obligations. These breaches did not affect the interests of depositors and were promptly rectified by the Als.

The CAMEL Approval Committee<sup>6</sup> completed a review of the CAMEL ratings of all the 182 Als. No Als appealed against the Committee's decisions.

### Table 4 Summary of other supervisory activities

		2022	2021
1	Cases considered by the Banking		
	Supervision Review Committee	7	6
2	Reports commissioned under		
section 59(2) of the BO		8	10
3	Approval of applications to		
	become controllers, directors,		
	chief executives or alternate		
	chief executives of Als	175	195

#### **Promoting Regtech adoption**

In 2022, the HKMA continued to promote Regtech adoption by the banking sector. The resources available in the HKMA's Regtech Knowledge Hub were enriched to encourage greater sharing of Regtech adoption experience and expertise within the Regtech ecosystem in Hong Kong. A set of Regtech Adoption Practice Guides and a series of Regtech use case videos were published via the Hub to provide practical guidance on the implementation of Regtech solutions. Thanks in part to these efforts, Regtech adoption in the banking sector gathered further momentum during the year, with use cases spanning a wide range of banking operations, from credit, liquidity, operational to compliance risk management.

#### Adoption of supervisory technology

The HKMA is building an end-to-end digital supervisory platform to enhance the efficiency and effectiveness of its supervisory processes. During the year, the HKMA identified suitable solutions for the various supervisory technology (Suptech) initiatives that made up the platform, and commenced system design and development work. In addition, the HKMA completed additional proof-of-concept (PoC) exercises on advanced analytics projects to enhance the forward-looking capabilities of the HKMA's supervisory processes. These PoC exercises explored the use of network analytics solutions to visualise the interconnections and risks between counterparties and natural language processing techniques to monitor market sentiment.

A senior management committee set up within the HKMA to consider, advise and make recommendations to the Monetary Authority on major authorization matters under the Banking Ordinance, with a view to ensuring that decisions on authorization matters are taken in a fair and reasonable manner.

The CAMEL Approval Committee was established to review the CAMEL assessments conducted on individual Als. The Committee is chaired by an Executive Director, and includes at least two senior staff members within the banking departments of the HKMA who have not been involved in conducting the CAMEL assessments in question.



# International co-operation Co-operation with overseas authorities

During the year, the HKMA participated in 32 college-ofsupervisors meetings organised by the home supervisors of 23 banking groups with significant operations in Hong Kong. A broad range of issues were discussed, covering areas such as financial soundness, risk management controls and operational resilience.

The HKMA participated in the cross-border resolution planning of 14 global systemically important banks (G-SIBs) through Crisis Management Groups (CMGs) and Resolution Colleges to enhance the resolvability of these banks and the crisis preparedness of the relevant home and host authorities. The HKMA also led the regional resolution planning work and organised the Asia CMG discussions for a G-SIB where progress of enhancing resolvability was reviewed and forward priorities were set.

Bilateral meetings were held during the year with overseas banking supervisors and resolution authorities. 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 as a member in a range of international forums for banking supervisors:

- The Group of Central Bank Governors and Heads of Supervision;
- The Basel Committee on Banking Supervision (Basel Committee);
- The Basel Committee's Risks and Vulnerabilities Assessment Group;
- The Basel Committee's Supervisory Cooperation Group; and
- The Basel Committee's Policy and Standards Group.

Under the structure of the Basel Committee, the HKMA serves as a co-chair of the Policy and Standards Group and the chair of the Pillar 2<sup>7</sup> Expert Group. It is also represented in the Task Force on Climate-related Financial Risks, the Basel Core Principles Task Force, and the following Expert Groups:

- Accounting and Audit;
- Anti-money Laundering and Counter-financing of Terrorism:
- Capital and Leverage Ratio;
- Credit Risk and Large Exposures;
- Disclosure;
- Financial Technology;
- Liquidity;
- Margin Requirements;
- Market Risk;
- Operational Resilience;
- Pillar 2; and
- Stress Testing.

The HKMA is a member of the Central Banks and Supervisors Network for Greening the Financial System and, jointly with the SFC, represents Hong Kong in the International Platform on Sustainable Finance. During the year, the HKMA also led the Financial Stability Board (FSB) London Interbank Offered Rate (LIBOR) Drafting Team, which focused on supervisory issues associated with LIBOR transition.

At the regional level, the HKMA is a member of the Executives' Meeting of East Asia-Pacific Central Banks (EMEAP)<sup>8</sup>; the South East Asia, New Zealand and Australia (SEANZA) Forum of Banking Supervisors; and the South East Asian Central Banks (SEACEN) Research and Training Centre.

As part of its work in the EMEAP Working Group on Banking Supervision, the HKMA is the champion of the Interest Group on Liquidity. During the year, the Interest Group on Liquidity exchanged views and shared experiences regarding the implementation of Basel III liquidity standards in the EMEAP jurisdictions. The HKMA is also the champion of the Interest Group on Sustainable Finance, which aims to promote information sharing on the management of climate-related risks faced by banks in the region.

Pillar 2 is a framework for determining any additional capital that a bank should hold principally to cover risks either not captured, or not adequately captured, under the minimum capital requirement (i.e. Pillar 1) of the Basel capital standard.

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

The HKMA participates actively in the work of the G20/OECD<sup>9</sup> Task Force on Financial Consumer Protection, which supports the implementation of the G20/OECD High-level Principles on Financial Consumer Protection and develops the Effective Approaches for the application of these principles, taking into account operations in an increasingly digital environment. This includes providing inputs to the comprehensive review and updating of these principles undertaken by the Task Force. The updated High-level Principles were endorsed by the G20 Leaders in November.

The HKMA joined the International Financial Consumer Protection Organisation (FinCoNet) as a member institution in July, with a view to deepening engagement with fellow regulators, as well as sharing Hong Kong's experience in the area of financial consumer protection. The HKMA is also a member of the Supervisors Roundtable on Governance Effectiveness<sup>10</sup> which aims to advance innovation in influencing culture reform in the financial sector.



Ms Maria Lúcia Leitão (left), Chair of FinCoNet 2019-2022, welcomes Mr Alan Au (right), Executive Director (Banking Conduct) of HKMA, to the Annual General Meeting 2022 in Lisbon, Portugal. This is the first meeting that the HKMA participates in as a member institution

The HKMA began a second two-year term as co-chair of the FATF Evaluations and Compliance Working Group, leading preparatory work for the fifth round of mutual evaluations that will commence in 2024, participating in a leadership retreat to set FATF priorities for 2022 to 2024, providing a reviewer for the FATF mutual evaluation of Indonesia, as well as participating in the working group on Cross-border Payments Data and Identifiers established under the FSB.



Mr Stewart McGlynn (middle), Head (AML and Financial Crime Risk) of HKMA, chairs a FATF Evaluations and Compliance Working Group meeting in Paris, France

In the area of implementing resolution reforms, the HKMA is a member of the FSB Resolution Steering Group (ReSG), its Expanded Group on alternative financial resources for the resolution of central counterparties (CCP Expanded Group), as well as the Cross-Border Crisis Management Group for banks (bankCBCM). During the year, the HKMA was re-appointed as chair, for another two-year term, of the EMEAP's Study Group on Resolution (SGR). See *International and cross-border co-operation* on page 97 for more details.

#### Basel Committee Regulatory Consistency Assessment Programme

Through its Regulatory Consistency Assessment Programme, the Basel Committee monitors, assesses and evaluates its members' implementation of the Basel standards. The HKMA participated in the assessment of Japan's large exposures standards; the related report was published in September.

<sup>&</sup>lt;sup>9</sup> Organisation for Economic Co-operation and Development.

Chaired by the Federal Reserve Bank of New York



### Implementation of Basel Standards in Hong Kong

#### Capital standards

The Banking (Capital) (Amendment) Rules 2022 came into operation on 1 July to implement the *Capital requirements* for banks' equity investments in funds.

During the year, the HKMA consulted the industry on proposed amendments to the Banking (Capital) Rules (BCR) for implementing the Basel III final reform package. Industry consultation was also conducted on two new SPM modules, MR-1 on "Market Risk Capital Charge" and MR-2 on "CVA Risk Capital Charge", as well as on the updated templates of banking returns associated with some of the revised capital standards in the package.

In light of competing priorities and resource constraints amid challenges associated with the COVID-19 pandemic, as well as the need to harmonise with the implementation schedules of major jurisdictions, the local implementation of the revised capital standards in the Basel III final reform package has been adjusted as follows:

- (i) For those on credit risk, operational risk, the output floor and the leverage ratio, to a date no earlier than 1 January 2024; and
- (ii) For those on market risk and credit valuation adjustment (CVA) risk, to a date no earlier than 1 January 2024 (which may not be the same as the date referred to in (i) above), even though Als will be required to implement them for reporting purposes by 1 January 2024.

The HKMA is preparing necessary amendments to the BCR to implement the revised capital standards, supported by supplementary guidance as appropriate.

In March, the HKMA consulted the industry on a proposed amendment related to the condition for raising the jurisdictional Countercyclical Capital Buffer (CCyB) for Hong Kong above zero under the BCR. In November, the HKMA consulted the industry on the draft revised SPM module CA-B-1 "Countercyclical Capital Buffer – Approach to its Implementation", including the introduction of a Positive Neutral CCyB for Hong Kong, and provided more

details about the proposed amendment to the BCR in relation to this.

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 2023 and their corresponding higher loss-absorbency capital requirements.

Given that Part 10 (Calculation of Sovereign Concentration Risk) of the BCR largely leverages on the measurement methodologies specified in Part 7 of the Banking (Exposure Limits) Rules (BELR), the proposed amendments to the BELR mentioned below in turn engender consequential amendments to the former. The HKMA has developed proposed amendments to the relevant provisions in the BCR where parallel updates are required.

#### **Exposure limits**

The HKMA has continued its work on the proposed amendments to the BELR, mostly as a consequence of the proposed amendments to the credit risk and market risk capital frameworks under the BCR.

#### Disclosure standards

The HKMA consulted the industry on the proposed amendments to the Banking (Disclosure) Rules for implementing the new and revised disclosure requirements published by the Basel Committee, namely *Pillar 3<sup>11</sup> Disclosure Requirements – Updated Framework* (December 2018), *Revisions to Leverage Ratio Disclosure Requirements* (June 2019) and *Revisions to Market Risk Disclosure Requirements* (November 2021). These new and revised disclosure requirements mainly reflect the revised capital standards under the Basel III final reform package, and set out some optional disclosure requirements for specific exposures to be implemented where considered necessary by the supervisor of a jurisdiction.

#### Liquidity standards

The HKMA is preparing amendments to the Banking (Liquidity) Rules, as a consequence of the proposed amendments to the BCR.



#### Regulatory regime for over-the-counter derivatives market

The HKMA oversees compliance of Als and approved money brokers (AMBs) with the mandatory reporting, clearing and related record-keeping requirements on over-the-counter (OTC) derivatives transactions under the SFO. Close dialogue is maintained with Als, AMBs and other industry participants on various reporting issues arising from OTC derivatives market developments and evolving international standards to ensure compliance with the relevant requirements by Als and AMBs.

### Enhancing the supervisory policy framework

## Regulation of over-the-counter derivatives transactions

Since 1 March 2017, the HKMA has implemented the global margin and risk mitigation standards for Als involved in non-centrally cleared OTC derivatives transactions. The final implementation phase of the initial margin requirements commenced on 1 September 2022. The HKMA has engaged the industry to assess the implications of market developments on the exchange of margin and has continued to co-ordinate with other member jurisdictions of the Basel Committee and International Organization of Securities Commissions (IOSCO) Working Group on Margin Requirements on implementation-related matters.

## Other supervisory policies and risk management guidelines

In 2022, the HKMA progressed with its work on various policies and guidelines, including the following:

Jul

issued the revised SPM module OR-1 on "Operational Risk Management", primarily to implement the Revisions to the Principles for the Sound Management of Operational Risk issued by the Basel Committee in March 2021.



issued and gazetted the revised SPM module CG-3 on "Code of Conduct" to strengthen the conflicts of interest policy requirements.

#### Balanced and responsive supervision

In view of the growing importance of private banks in the Hong Kong banking sector, the HKMA extended the balanced and responsive supervision (BRS) initiative to cover private banks, and hosted the first roundtable meeting with them to understand and discuss their key pain points in business development. In this connection, the HKMA updated the requirements on the sale and distribution of loss-absorption products and provided further guidance on suitability assessment, and clarified its supervisory expectations on CDD requirements. Separately, recognising the potential challenges faced by the banking industry in promoting green and sustainable banking and capacity building, the HKMA held a new round of discussions with major retail banks to clarify its supervisory expectations and provide further guidance to assist banks in addressing challenges around

data and tools for climate risk management and disclosure, as well as to discuss initiatives to facilitate talent development in the banking sector. The BRS initiative has provided a useful platform for the HKMA and the industry to exchange views and have constructive dialogues on how to support the further development of the banking industry.

### Accounting standards

Regular dialogues were held 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 updates on accounting, auditing and financial reporting standards and their implications for banks, as well as major international and domestic banking regulatory developments. The HKMA has continued to work with other authorities on issues related to banks' provisioning practices.

#### Green and sustainable banking

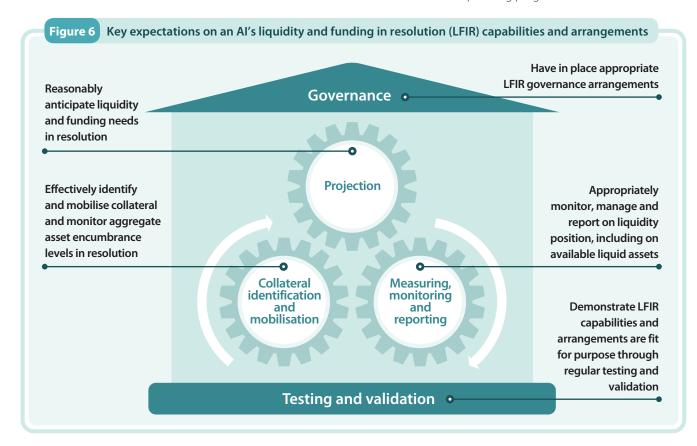
The HKMA is working to incorporate climate-related considerations into the supervisory framework, taking into account the Basel Committee's principles for the effective management and supervision of climate-related financial risks, and its responses to frequently asked questions on such risks. To support the industry in identifying, measuring and monitoring their exposures to climate risks, the HKMA is exploring measures and developing technological solutions. The HKMA has been working with other local financial regulators to develop a green classification framework, with a view to increasing transparency across the financial markets and enabling consistent policy-making on green finance. More details about the HKMA's policy work on green and sustainable banking are given in the *Building a Sustainable Financial System* chapter of the *Sustainability Report 2022*.

#### Resolution

In 2022, the HKMA advanced its work to operationalise the Hong Kong resolution regime for banks. Progress has been made in establishing resolution standards, undertaking resolution planning and developing resolution execution capability. In addition, the HKMA actively participated in cross-border co-operation on resolution through institution-specific engagements such as the CMGs for G-SIBs, as well as through international and regional fora, including the FSB ReSG and the EMEAP SGR.

#### **Resolution standards**

The HKMA continued to formulate policy standards, with which Als need to comply in order to enhance their resilience and resolvability. In July, the HKMA issued the Financial Institutions (Resolution) Ordinance (FIRO) Code of Practice chapter LFIR-1 *Resolution Planning – Liquidity and Funding in Resolution*, which sets out the Monetary Authority's expectations, in line with relevant FSB guidance<sup>12</sup>, in relation to the capabilities and arrangements that an Al should have in place, in business as usual period, in order to support an Al's ability to meet liquidity and funding needs in resolution. The key expectations are summarised in Figure 6. Work to be done by the Als towards satisfying the expectations outlined in the chapter will be an integral part of the HKMA's bilateral resolution planning programmes with the Als.

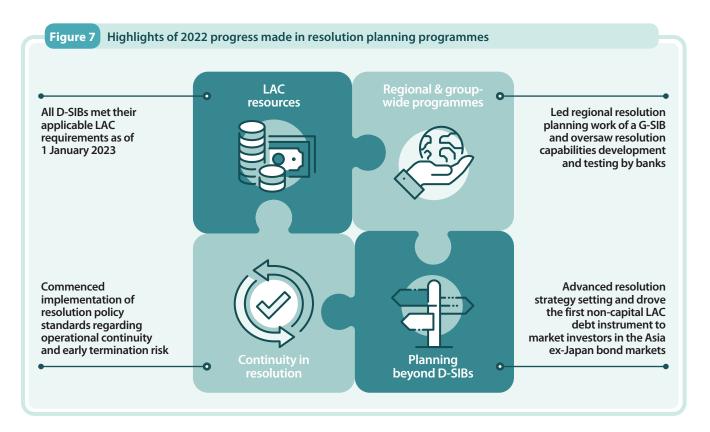


The FSB has identified liquidity and funding as important topics to be addressed in resolution planning and has published guidance on the Funding Strategy Elements of an Implementable Resolution Plan, complementing the Guiding Principles on the temporary funding needed to support the orderly resolution of a Global Systemically Important Bank.



#### **Resolution planning**

The HKMA continued to advance resolution planning for each of the D-SIBs and other locally incorporated Als with total consolidated assets above HK\$300 billion in co-ordination with the home and host authorities to enhance the resilience and resolvability of these banks (Figure 7).



Through resolution planning programmes, the HKMA works with Als to implement the changes needed to address identified impediments to their orderly resolution. In particular, the D-SIBs have built up a new layer of loss-absorbing capacity (LAC) resources by further issuing capital and non-capital LAC debt instruments in the year to facilitate loss absorption and recapitalisation in case of failure. As of 1 January 2023, all D-SIBs met their applicable LAC requirements, representing a milestone in enhancing the resolvability of these banks and resilience of the banking system. The LAC resources<sup>13</sup> of D-SIBs stood at 25.4% of risk-weighted amount at the end of 2022. Relevant periodic public disclosures of LAC positions and instruments are being made by banks, which facilitate and promote transparency and market discipline.

In addition, the HKMA has commenced the implementation of policy standards on operational continuity in resolution. Self-assessments of existing capabilities by banks against the expectations set out by the HKMA were conducted and work plans to address any gaps identified were developed. Banks' preparatory work for meeting the HKMA requirements as per the Financial Institutions (Resolution) (Contractual Recognition of Suspension of Termination Rights – Banking Sector) Rules and for identifying and mitigating early termination risks in resolution, including the review of financial contracts and outreach to relevant counterparties, has also commenced.



Beyond D-SIBs, the HKMA continued to advance the resolution planning for other locally incorporated Als with total consolidated assets above HK\$300 billion by advancing the determination of preferred resolution strategies for these Als and imposing LAC requirements to facilitate removal of impediments to resolvability. In 2022, one of these Als issued its inaugural non-capital LAC debt instrument to market investors, the first such offering in the Asia ex-Japan bond markets.

In terms of home-host co-ordination, the HKMA led the regional resolution planning work for the Asia resolution group of a G-SIB and organised the Asia CMG discussions where progress of enhancing resolvability was reviewed and forward priorities were set. In addition, banks continued to build up and test resolution capabilities as part of their groupwide programmes. This has involved a wide spectrum of actions, such as development of processes for valuations in resolution, demonstration of capabilities for estimating and reporting liquidity needs in resolution, as well as cross-border drills of contingency arrangements for access to payment clearing. The HKMA also engaged in discussions among authorities on the management and deployment of unallocated total loss-absorbing capacity (uTLAC) resources within resolution groups, and the enhancement of homehost co-ordination arrangements, including authorities' playbooks on resolution execution.

#### **Resolution execution capability**

The HKMA continued to strengthen its capability to execute resolution. The governance arrangements for decision-making in relation to initiation of resolution were updated in line with the institutional arrangements and insights gained from simulation exercises conducted. The work to develop capabilities for executing the transfer stabilization options in resolving an Al under the FIRO by drawing upon the Resolution Advisory Framework was advanced. The HKMA also progressed the development of a crisis management framework to support co-ordination between resolution authorities in Hong Kong.

#### International and cross-border co-operation

The HKMA is actively involved in the implementation of resolution reforms through its membership in the FSB. In the FSB's 2022 Resolution Report, *Completing the agenda and sustaining progress*, the FSB states that as the 15-year anniversary of the global financial crisis is on the horizon in 2023, it is critical to maintain momentum and avoid complacency. The report recognises that while significant progress has been made in resolvability in the banking sector, multiple challenges lie ahead and require continued commitment of authorities and banks to sustain progress. For example, the approaches to uTLAC and funding in resolution remain areas of focus, and testing of resolvability capabilities is a forward priority. Beyond G-SIBs, work has been conducted on issues relating to resolution planning for non-G-SIBs that could be systemic in failure.

At the regional level, the HKMA was re-appointed to continue to chair and serve as the secretariat of the EMEAP SGR for another two-year term. The SGR met virtually during 2022 and undertook a range of activities, including thematic studies, table top exercises as well as a resolution workshop in order to support knowledge sharing in relation to resolution. In addition, the HKMA took part in the design and execution of a three-day regional crisis simulation exercise organised by the Financial Stability Institute (FSI) of the Bank for International Settlements (BIS) involving 10 authorities including central banks, supervisory and resolution authorities as well as deposit insurers in Asia Pacific, with a view to enhancing cross-border co-operation. The HKMA also continued to engage with relevant stakeholders and contribute to resolution-related events, for example those organised by the FSB, the BIS's FSI as well as the SEACEN Research and Training Centre.

Cross-border co-operation is an important component of resolution planning for G-SIBs given the international nature of their businesses and operations. During the year, the HKMA participated in the cross-border resolution planning of 14 G-SIBs through CMGs and Resolution Colleges. As part of this work, the HKMA shared updates on resolution policy development, contributed to the FSB's eighth resolvability assessment process for these G-SIBs and worked with the relevant authorities to enhance cross-border crisis preparedness.



#### International resolution policy work

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

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 an active part in formulating and implementing international resolution policy standards, contributing through its membership in the FSB ReSG, its CCP Expanded Group, as well as the bankCBCM.

In particular, the HKMA contributed to a wide range of work in 2022 as a member of the following workstreams of the bankCBCM<sup>14</sup>:

- The TLAC Technical Expert Group, which clarified the technical guidelines on uTLAC resources measurement and developed considerations for CMGs regarding the approaches to management and deployment of uTLAC resources;
- The Bail-in Execution workstream, which organised a workshop for authorities and stakeholders to discuss technical cross-border issues of a bail-in execution, and which explored issues regarding cross-border recognition of resolution actions;

- The Funding in Resolution workstream, which organised deep-dive sessions for authorities to share practices and views pertaining to cross-border funding in resolution, including in regard to the firms' ability to mobilise collateral across borders;
- The cross-border co-operation and co-ordination workstream, which organised a workshop for authorities (including the HKMA) to share practices for testing firms' capabilities and experiences on developing cross-border co-ordination arrangements;
- The Continuity of Access (CoA) to FMIs workstream, which supported the FSB's work to promote crossborder co-operation in relation to CoA to FMI services for firms in resolution; and
- The Digital Innovation and Resolution workstream, which was newly set up in 2022 with a view to assessing the extent to which digital innovation could affect banks' resolvability, resolution planning and resolution execution.

For more details on the FSB's latest progress in these workstreams, see Sections 3.2, 3.4, 3.6 and 3.8 of 2022 Resolution Report: Completing the agenda and sustaining progress published by the FSB in December 2022.



# Bank consumer protection Code of Banking Practice

The Code of Banking Practice Committee, with the active participation of the HKMA, commenced the second phase of a comprehensive review of the Code. Industry consultation was launched in December on the proposed enhancements, which include measures to further strengthen the protection to banking consumers in the digital environment, support customers' assessment of their own repayment ability to promote responsible borrowing, enhance customers' ability in managing their credit and strengthen fair treatment of customers throughout the banking life cycle.

Overall compliance with the Code of Banking Practice remained satisfactory. According to self-assessment results, almost all Als and their subsidiaries and affiliated companies reported full or nearly full compliance during the assessment period in 2021<sup>15</sup>, while a few have taken prompt remedial action to rectify areas of non-compliance.

## Additional payment arrangement for property transactions

As a result of the continuous effort between the HKMA, the banking industry and other stakeholders, HKAB announced in November the rollout of an additional payment arrangement for property transactions (PAPT) in respect of mortgage refinancing transactions. Under PAPT, bank customers may choose to adopt direct transfer via the interbank payment system for a residential mortgage refinancing transaction. PAPT can better facilitate the development of digital finance while strengthening protection of mortgage customers (Figure 8).



#### "Buy Now, Pay Later" products

In view of the rapid development of the "Buy Now, Pay Later" (BNPL) concept, one of the new breed of innovative personal credit products, and associated concerns over impulsive borrowing and even over-borrowing by customers, the HKMA issued a set of regulatory guidance in September to enhance consumer protection in respect of BNPL products launched by banks, following consultation with the banking industry. The HKMA also issued social media posts (Figure 9) and produced educational radio broadcasts to raise consumer awareness on the risks associated with such products.



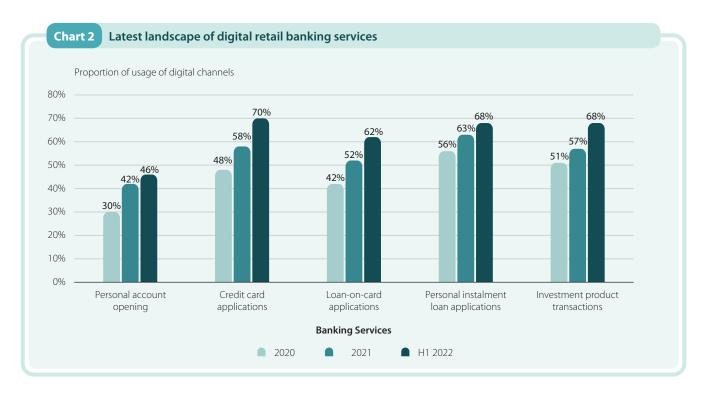


## Customer protection amid rapid digitalisation of banking services

Banks in Hong Kong have been at the forefront of fintech, enabling the public to access and use innovative digital banking services. In this connection, the HKMA published an *inSight*<sup>16</sup> article in April to share, among others, the digitalisation trend of the retail banking business, in particular the public's growing acceptance and usage of digital channels when accessing banking products and services in recent years. Recognising that banking consumer

protection is an ongoing and important task, the article also highlighted the measures taken by the HKMA to protect consumers who use digital channels, as well as the priorities in the years to come, such as developing protection measures for some new service models.

Chart 2 below demonstrates an increasing trend in the usage of digital channels by the public in recent years, particularly in respect of applications for personal credit and personal account opening.



Building on its ongoing efforts to enhance consumer protection amid increasing digitalisation, the HKMA completed a thematic review on disclosure measures in respect of applications for credit products through digital platforms, and issued a circular in December to share the observations and sound practices identified in the review with the banking industry. Als are also reminded of the

importance of ensuring proper customer protection in the digital environment, in light of the potentially higher risks of impulsive borrowing, and even over-borrowing. Meanwhile, the HKMA also maintains close dialogue with banks on consumer protection trends, such as increasing frauds and scams in card transactions, with a focus on customer communication and education to prevent losses.

in Sight is the HKMA's official column, featuring articles written by senior executives on the major new policies and initiatives of the HKMA, or other topical issues of interest to the public.



#### **Enhanced measures for real-time fund transfers**

To enhance protection for bank customers who might inadvertently make mis-transfers of funds, the HKMA introduced requirements for Als to adopt, among others, mandatory name matching by the end of 2022 for real-time fund transfers of HK\$10,000 or more through the Faster Payment System (FPS) and similar intra-bank fund transfers, where a payer inputs the payee's bank account number as the identifier (Figure 10).



## Consumer protection in respect of dormant accounts and unclaimed deposits

The HKMA continues to follow up with banks on the handling of dormant accounts and unclaimed deposits, including the checking of the status of unclaimed deposit account holders and appropriate follow-up actions to support the reunification of assets with the rightful owners. An updated leaflet titled *Understanding Dormant Accounts and Deceased Accounts* was published by HKAB, in consultation with the HKMA, in August to educate the public on how to avoid having inactive and dormant accounts; how to search for and recover lost accounts; and how to handle accounts of those deceased, and the documents required.

#### **Culture dialogues**

Since its commencement in 2019, the culture dialogue initiative has enhanced the HKMA's engagement with the leadership of Als to discuss the effectiveness of Als' culture enhancement efforts and provide supervisory feedback, including observations from the HKMA's ongoing supervision. During 2022, the HKMA conducted seven culture dialogue meetings with senior management and/or board members of Als.

## Addressing the risks of hiring individuals with misconduct records

The HKMA issued a circular in May to endorse the Guidelines on the Mandatory Reference Checking (MRC) Scheme issued by the industry associations with the aim of tackling the "rolling bad apples"<sup>17</sup> phenomenon in the local banking sector.

The MRC Scheme is an important component of the HKMA's effort to enhance bank culture in Hong Kong. Under the Scheme, all Als share and obtain conduct-specific reference information about prospective employees using a common protocol that covers seven years prior to the application for the position, so that the recruiting Als can make a more informed employment decision. To allow sufficient time for Als to put in place necessary internal controls, policies and procedures, there is a 12-month preparatory period for the implementation of the MRC Scheme, i.e. Als are expected to implement Phase 1 of the MRC Scheme by May 2023.

<sup>&</sup>quot;Rolling bad apples" refers to the situation where individuals who have engaged in misconduct behaviour in one institution but can obtain employment elsewhere without disclosing their earlier misconduct to the new employer.



### Bank culture

Over the years, the HKMA has promoted sound culture in the banking industry by launching various culture initiatives, including self-assessment on bank culture and culture dialogues with individual banks. In 2022, the HKMA, with the support of an external consultant, completed a focused review on incentive systems of front offices in 20 retail banks ("Focused Review"). The Focused Review was a very large scale industry-wide culture exercise conducted in the Hong Kong banking industry, drawing insights from information gathered from a wide range of activities, including the first-ever industry-wide employee survey inviting all frontline staff of the 20 retail banks to participate (Figure A).

Figure A

A range of assessment activities

#### Industry-wide employee survey



25,112

All frontline retail bank staff

**70%** response rate

#### **Document reviews**



20

Incentive systems of retail banks

Representing ALL major retail banks in Hong Kong

#### **Individual interviews**



300

One-on-one interviews conducted with

bank staff supervisors senior management

#### Focus group discussions



564

Frontline staff participated in

**60** sessions



Following completion of the Focused Review, the HKMA published the Review Report in May to share the identified industry-wide observations. The Review Report highlights four major observations in relation to the way incentive systems of front offices drive frontline behaviour and customer outcomes. Based on these major observations, the HKMA devised six incentive system design principles (Figure B) and identified 17 sound incentive practices to reinforce good customer and conduct outcomes (Figure C).

#### Figure B Incentive system design principles



To avoid staff struggling with competing goals



Development of an aligned system

To ensure consistency with other mutually reinforcing components with the overall culture of the bank



Focusing on intrinsic motivators

To rely more on robust non-financial incentives, which are more effective and with less risk and cost to banks





Wise use of technology

To embrace fintech and adopt more advanced technologies (such as Artificial Intelligence and Machine Learning) to help detect undesirable behaviours and monitor misconduct more efficiently and effectively



Close connection between leaders and staff

To foster stronger alignment at various levels with a view to improving the impact of incentives by increasing opportunities for robust oversight, feedback and assessment, especially on non-financial performance



Minimising potential misconduct and mis-selling behaviours

To carefully design the incentive systems to induce sound behaviour of staff and minimise any potential misconduct and mis-selling activities





#### Figure C Sound incentive practices

	Principle 1	Principle 2	Principle 3	Principle 4	Principle 5	Principle 6
Sound Practices	Clear prioritisation of customer outcomes	Development of an aligned system	Focusing on intrinsic motivators	Wise use of technology	Close connection between leaders and staff	Minimising potential misconduct and mis-selling behaviours
Rewarding investment in long-term relationships	0	0	0			
2. Aligning internal policy with values	0	0	0			
Reinforcing customer outcomes over solely fulfilling customer requests	0	0	0			•
4. Increased focus on customer-oriented behaviour, not sales	0	0	0			0
5. Supporting staff to understand customer needs	0	0		0		0
6. Customer outcomes over process compliance	0		0	0		0
7. Integrating compliance requirements into system design	0	0		0		0
Fair and objective monitoring of conduct				0		0
9. Responding to staff feedback		0		0	0	
10. Aligning metrics with behaviour	0				0	
11. Rewarding non-financial performance	0	0	0			
12. Reducing incentive system complexity		0	0			
13. Setting dynamic targets		0				0
14. Managing behavioural risk from tactical incentive programs		0				0
15. Clear and appropriate consequences for undesired behaviour		0				0
16. Considering diverse perspectives		0	0		0	
17. Amplifying good conduct with social rewards			0		0	

For details, please refer to the full Report on the Focused Review:





In addition to the publication of the Review Report, the HKMA has also conducted the following as part of the entire Focused Review exercise:



• Published **Industry Report** covering industry-wide observations



 Issued Individual Bank Reports of the Review to all 20 participating banks



Conducted industry briefing with **over 100 participants** from the banking industry

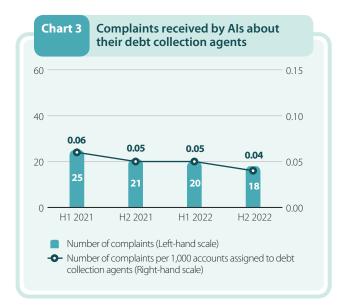


## **Engagement of intermediaries by authorized institutions**

Measures were introduced to further protect bank customers and reduce potential risks to the reputation of the banking industry from possible malpractices 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 28,000 enquiries received during 2022.

## Customer complaints relating to debt collection agents employed by authorized institutions

The number of complaints received by Als on their debt collection agents decreased to 38 from 46 in 2021 (Chart 3). The HKMA will continue to monitor Als' engagement with debt collection agents.



#### **Credit data sharing**

The HKMA continued to work closely with industry associations including HKAB, the Hong Kong Association of Restricted Licence Banks and Deposit-taking Companies and the Hong Kong S.A.R. Licensed Money Lenders Association Limited, to introduce more than one consumer credit reference agency (CRA) in Hong Kong through the Credit Reference Platform (CRP). This was done with a view to enhancing the service quality of consumer CRAs and reducing the operational risk of having only one commercially run service provider in the market.

The CRP was launched in November and the industry associations selected three CRAs to provide consumer credit reference services under the multiple CRAs model.

Subsequent to the launch of the CRP, participating credit providers commenced loading of consumer credit data onto the CRP, which will then be downloaded by the selected CRAs in preparation for their provision of consumer credit reference services.



#### Financial inclusion

As part of its continued efforts to promote financial inclusion, the HKMA actively encourages banks to further enhance the coverage of the banking network through conventional and innovative channels. Banks have responded positively to the HKMA's call for the provision of basic banking services. During the year, some banks set up a new branch and self-service facilities at large-scale public housing estates in new development areas of Hong Kong where they are expecting a growing population and demand for banking services. These represent banks' efforts to enhance access to banking services and manifest their commitment to financial inclusion.



Mr Eddie Yue, Chief Executive of HKMA (third from right) and Mr Alan Au, Executive Director (Banking Conduct) of HKMA (first from right), attend the opening ceremony of a bank branch at Queen's Hill Estate in Fanling

The HKMA monitored banks' implementation of the *Practical Guideline on Barrier-free Banking Services*, the *Guideline on Banking Services for Persons with Intellectual Disabilities*, and the *Guideline on Banking Services for Persons with Dementia* issued by HKAB<sup>18</sup>. Als providing retail banking services have completed implementation of the three published industry guidelines. The HKMA also collaborated with the Consumer Council to deliver a consumer education talk targeted at parents and caregivers to promote better understanding of banking services for persons with intellectual impairment.

During the pandemic, many members of the public faced difficulties in reactivating their dormant or suspended Mainland bank accounts because of their inability to visit the banks' branches on the Mainland in person due to the travel restrictions. The HKMA co-ordinated with the relevant banks and the Mainland authorities, and issued guidance to banks to facilitate reactivation of Mainland bank accounts without the need for customers to cross the boundary in person. About half a million Mainland bank accounts of Hong Kong customers have been reactivated through such facilitative measures. Similar facilitative measures were introduced to customers of Hong Kong bank accounts who are currently residing outside Hong Kong.

More details of the progress made in enhancing accessibility to basic banking services can be found in the *Sustainable HKMA* chapter of *Sustainability Report 2022*.



### Opening and maintaining bank accounts

The HKMA maintains close communication with the banking industry and business sectors to promote exchanges on issues associated with opening and maintaining bank accounts in Hong Kong. The HKMA's dedicated Account Opening and Maintenance Team handles and follows up on enquiries and feedback received from the public as well as the local and overseas business communities through a dedicated email account and a hotline.

The HKMA, in collaboration with the Customs and Excise Department, organised a roundtable session in July to facilitate direct dialogue among the banking industry and money service operators (MSOs), for exchanging views and sharing practical experiences regarding account opening and maintenance. About 50 representatives from banks, HKAB, the Hong Kong Money Service Operators Association and MSOs attended the session.

The HKMA and the Customs and Excise Department jointly organise a roundtable session

The HKMA's priority has been to ensure banks implement appropriate and effective CDD and do not undermine access to banking services by legitimate businesses and ordinary residents. At the encouragement of the HKMA, several banks are offering the Simple Bank Account service, which provides basic banking services with less extensive CDD measures. In 2022, about 3,600 such accounts were opened by banks, with the cumulative total number of such accounts increasing to over 12,700 since the service was first launched in 2019.

With the concerted efforts made to enhance customer experience in the CDD process, as well as ongoing communication with relevant stakeholders, the average unsuccessful rate of account opening applications is now around 4%, representing a significant improvement from around 10% in early 2016.



#### **Deposit protection**

Currently, the protection limit under the Deposit Protection Scheme (DPS)<sup>19</sup> is HK\$500,000 per depositor per bank, which has been in place since 2011. To ensure the DPS remains effective in serving its public policy objectives, the Hong Kong Deposit Protection Board (HKDPB) has initiated a comprehensive review of the DPS to examine whether its features remain in line with international practices and the latest developments in Hong Kong. Based on the findings of the comprehensive review, the HKDPB has been formulating a package of policy recommendations on enhancements to the DPS and aims to solicit views and comments from the public and other stakeholders in 2023.

The HKDPB conducts drills regularly to ensure the payout readiness of the DPS. In 2022, the drill involved the participant banks of the FPS to test out the new electronic payment channels in processing the DPS compensation payment in co-ordination with the payout agent bank and Hong Kong Interbank Clearing Limited. The drill was successfully completed and no major issue was noted. Apart from payout drills, the HKDPB continued with its programme to monitor and ensure DPS member banks' readiness in submitting information in compliance with the Information System Guideline.

To promote the HKDPB's role as the "Guardian of Deposits", a multimedia publicity campaign with a new TV commercial themed "Keep Calm and Deposit Safely On" was launched with the aim of giving peace of mind to depositors. Reflecting increased focus on the younger generation, the Board launched the "Protecting Ah Chuen" social media campaign, which featured animated videos and interactive games to increase young people's interest in money-saving and their awareness of deposit protection.

#### **Banking complaints**

The HKMA received 3,459 banking complaints against Als or their staff in 2022, representing an increase of 17% or 498 cases from the previous year. In response to the rise, the HKMA made extra efforts and handled 3,202 complaint cases, up 11% year on year (Table 5). The HKMA's performance pledges on the response time to enquiries and complaints were generally met (Table 6).

#### Table 5 Banking complaints received by the HKMA

	Conduct- related	2022 General banking		2021
	issues	services	Total	Total
Received during the year	353	3,106	3,459	2,961
Completed during the year	270	2,932	3,202	2,892

## Table 6 Performance pledges of the HKMA in handling banking complaints

	Performance	Achievement
Items	Pledge	Rate
Acknowledge receipt of complaint-related		
enquiries or duly completed complaint		
forms	7 working days	100%
Preliminary response to complaints	10 working days	100%
Reply to complaint-related enquiries	15 working days	100%

The DPS in Hong Kong was established in 2006 with the primary objective of protecting depositors and hence contributing to banking stability.



Complaints related to credit cards increased by 25% to 667 cases in 2022 and continued to be the most common type of complaints received. Over 70% of these complaints concerned disputes over card transactions or unauthorised card transactions, and a majority of the cases were fraud related (e.g. phishing SMS messages or emails, online shopping scams). The HKMA has reminded Als to adopt appropriate measures to identify and report suspicious card transactions, and to take proper follow-up actions, including promptly notifying customers for card-not-present transactions with or without a one-time password, and collaborating with law enforcement agencies on information sharing and assisting in stop payments and criminal investigations. Insights from the handling of complaints also informed the HKMA's appropriate supervisory follow-up on technology risk management and consumer protection measures of Als concerned.

Another common category of complaints concerned the provision of banking services, namely the opening and maintenance of bank accounts. This category of complaints accounted for 19% of the total number of complaints received in 2022. The Als concerned have been reminded to put in place appropriate arrangements to review relevant procedures and to ensure sufficient resources for handling related enquiries/complaints in a fair and timely manner (Chart 4).

The HKMA also handled 232 informant reports, which mainly concerned banks' work arrangements or branch operations under the COVID-19 situation. For complaints or informant reports where supervisory concerns and/or staff conduct issues were identified, follow-up actions were taken as appropriate.





## Enhancement of HKMA's complaints handling process and updated supervisory guidance

In light of the continual rising trend of banking complaints received in recent years, during September to December, the HKMA engaged an external consultant to conduct a review of its complaints handling practices, procedures and resources allocation to further enhance effectiveness and efficiency. The HKMA fully implemented the consultant's recommendations in January 2023, including introducing ways to promote early resolution between complainants and banks concerned; modifying operational workflows to expedite the complaint handling process; and enhancing the consumer education impact of *Complaints Watch*<sup>20</sup>.

The HKMA has also issued an updated statutory guideline to Als on complaints handling and redress mechanisms to implement the latest international standards on financial consumer protection. Under the enhanced complaints handling framework, Als are expected to, among others, follow up and monitor any issues of concerns or control deficiencies as identified from the handling of customer complaints, to achieve improved financial consumer

protection on an ongoing basis; and proactively make use of alternative dispute resolution channels (such as mediation and arbitration services) when complaints involving monetary disputes referred by the HKMA cannot be resolved through Als' internal mechanisms.

#### **Enforcement**

The HKMA continued to enforce CDD and record keeping requirements under the Anti-Money Laundering and Counter-Terrorist Financing Ordinance (AMLO), taking proportionate disciplinary action to safeguard the stability and integrity of the banking system. This was done in respect of deficiencies in conducting on-boarding CDD and implementing name screening mechanism of customers' beneficial owners in one case, and for control lapses in relation to on-going CDD and enhanced customer due diligence (EDD) in high-risk situations in another one. In 2022, the HKMA also exercised the power under the Payment Systems and Stored Value Facilities Ordinance (PSSVFO) on a SVF licensee for control deficiencies in transaction monitoring (Table 7).

#### Table 7 Enforcement actions taken by the HKMA under different ordinances

Ordinance	Actions		
AMLO	0	Imposed HK\$17 million pecuniary penalties against two banks for failures in CDD and EDD in high-risk situations.	
PSSVFO	0	Imposed public reprimand and HK\$875,000 pecuniary penalties against a SVF licensee for failures in transaction monitoring.	
SFO	0	Referred 21 cases to the SFC after HKMA assessment/investigation.  The SFC, based on enforcement collaboration with the HKMA, banned four former relevant individuals from re-entering the industry, ranging from six months to life <sup>a</sup> .	
Insurance Ordinance	0	Received 182 insurance-related cases of Als, of which 46 cases were referred by the IA under the delegation arrangement. Completed the handling of 122 insurance-related cases of Als.	
BO and other relevant ordinances	0	Issued 36 compliance advice letters to Als and their staff members to remind them of the importance of regulatory compliance.	

a. Concerns about the fitness and properness of the former relevant individuals were related to the following misconduct: forging a customer's signature on a direct debit authorisation form, operating clients' accounts discretionarily without obtaining the clients' written authorisations under the guise of pre-signed client instruction forms, and having a record of criminal convictions under the Crimes Ordinance and the Prevention of Bribery Ordinance.

<sup>20</sup> Complaints Watch is a periodic newsletter issued by the HKMA to share with the banking industry information on complaints received by the HKMA. It highlights the latest complaint trends and emerging topical issues, and shares good practices that Als may find helpful.

To enhance the efficiency and effectiveness of enforcement work, and as part of its digitalisation programme, the HKMA adopted technology tools such as robotic process automation in its investigative processes as well as speech-to-text technology to support automatic transcription and analysis of audio recordings. Benefits were gained in freeing staff from repetitive duties and enabling them to focus on higher value-added tasks. In addition, visualisation tools have been deployed to help understand emerging trends and facilitate formation of data-driven views.

## Sharing feedback and good practices with the banking industry

To promote proper standards of conduct and prudent business practices among Als, two issues of *Complaints Watch* were published in 2022 to highlight issues identified from complaints that Als should take note of and to share good practices to guide Als' appropriate actions, including (i) protection of vulnerable customers in digital banking; (ii) selling of qualifying deferred annuity policies; (iii) business partnership with online personal financial service platforms; and (iv) fraud prevention in loan application processes.

The HKMA also encouraged the industry to collaborate in educational efforts using social media and other means to caution customers about different types of scams brought to light by the HKMA's handling of complaints (Figure 11).





### Dual awards to HKMA staff for handling of banking complaints

Two HKMA staff members, Mr Hung Pui-chuen, Manager of the Enforcement Division, and Ms Olivia Lam, Assistant Manager of the Complaint Processing Centre of the Enforcement Division, received Ombudsman's Awards 2022 for Officers of Public Organisations in recognition of their efforts in fostering a positive culture of service and promoting professionalism in complaints handling.

- Pui-chuen handles banking complaints with empathy and in a professional manner, gaining public recognition of the HKMA's guidance to banks on treating customers fairly.
- Olivia demonstrated her passion and professionalism in handling public enquiries and complaints, helping enhance public trust in banking services.



Dual awards for public service: Ms Carmen Chu (first from left), Executive Director (Enforcement and AML); Ms Alice Lee (first from right), Head (Enforcement); Mr Hung Pui-chuen (second from left), Manager (Enforcement); and Ms Olivia Lam (second from right), Assistant Manager (Enforcement); all from the HKMA, at the awards ceremony with Ms Winnie Chiu, The Ombudsman (middle)

The HKMA will continue to devote its best endeavours to handle customer complaints against banks, with a view to enhancing consumer protection and providing an exemplary model for the industry to treat customers fairly.

#### Capacity building in the banking sector

The banking sector continued to have strong demand for talented professionals to cater for business expansion in the areas of fintech, green and sustainable finance and Guangdong–Hong Kong–Macao Greater Bay Area (GBA) business. While it is important to attract top professionals from around the world, it is also crucial to develop local talent to enlarge the overall talent pool. The HKMA therefore focuses on two areas in terms of talent development: (i) grooming the younger generation to build a sustainable pipeline of future talent, and (ii) upskilling and reskilling existing practitioners to ensure they remain relevant amid the fast-evolving industry developments.

Specifically, building on its talent development strategy, "Connecting Talent to the Future", the HKMA implemented a number of initiatives during the year to help attract, develop and retain talent for the banking sector.



#### **Connecting Talent to the Future**

### **Grooming Future Talent**

## Banking Graduate Trainee Programme



The Banking Graduate Trainee Programme is a new initiative with an aim of nurturing more new entrants and enlarging the talent pool for fast-growing areas of the banking sector. Under the Programme, the banking sector provided nearly 100 entry-level job opportunities in fintech, green and sustainable finance, and GBA business for recent university graduates. In addition to work experience, the recruited trainees are able to participate in relevant professional trainings and centralised training seminars organised by the HKMA to help lay a solid foundation for their long-term career development in the banking industry.

#### **Banking GPS**

During the year, the HKMA launched a new online resource platform – Banking GPS – as a one-stop industry directory to further deepen understanding among young people of banking career prospects and opportunities. This is a resource-rich platform that introduces the structure, job responsibilities and career paths of major functions in a bank across the front, middle and back offices. The platform also provides job-hunting tips and experience sharing from industry practitioners, which are particularly useful for young people who are eyeing a role in the industry, now or in the future. Most importantly, it puts together job openings at different banks, making it a handy additional channel for interested individuals to find out about career opportunities.



For details, please refer to the Banking GPS web page:





## Future Banking Bridging Programme

FUTURE BANKING BRIDGING PROGRAMME 2022



The Future Banking Bridging Programme, a joint effort by the HKMA, the Hong Kong Institute of Bankers (HKIB) and the banking sector, is designed to better equip university students who aspire to build a career in banking. Building on the popularity of the inaugural Programme in 2021, the second round of the Programme was held in October and November 2022, providing a valuable opportunity for more than 200 university students to gain practical knowledge in the hottest areas of banking. The participants also had the chance to interact directly with bankers to get first-hand tips on landing a banking job and to experience the daily life of a banker outside the classroom through job shadowing.

#### **Banking Career Talk Series**

The HKMA, in collaboration with the banking industry and the HKIB, held career talks at local universities during 2022 to showcase career opportunities and prospects in the new era of the banking industry. The talks attracted a total of around 500 undergraduates from different universities and disciplines. During the talks, the speakers shared their banking knowledge, work experience and interview skills to help the participants better prepare for their career planning and development.







The Future Banking Bridging Programme's 2022 cohort comprises over 200 students from different universities



## Apprenticeship Programme for Private Wealth Management

The Apprenticeship Programme for Private Wealth Management is organised by the HKMA in partnership with the Private Wealth Management Association, enabling university students to build an early foundation for a career in the private wealth management industry through apprenticeships with a private wealth management institution and tailored training for two summers. From its inception in 2017 to the end of 2022, the Programme offered about 350 apprenticeship opportunities to university students. A new round of recruitment was conducted in November 2022 for a new batch of apprentices for 2023-2024.

## Promotion to secondary school students

To allow future generations to better understand and develop interest in the banking industry at an early stage, the HKMA proactively reached out to secondary school students as well as their teachers and parents during the year. In November, the HKMA hosted a banking career session at the Life Planning Education Conference organised by the Education Bureau (EDB) for about 80 career guidance teachers in Hong Kong and the Mainland to support their career planning guidance for high school students through the "Train the Trainer" approach. The HKMA also partnered with the Chinese Banking Association of Hong Kong (HKCBA) and the EDB to provide talks on the banking system for high school students participating in a summer programme. Further, the HKMA took part in a series of workshops organised by the Qualifications Framework Secretariat during 2022 to provide an overview of career prospects in the banking industry to around 400 high school students.



The HKMA participates in the Young Banker Summer Programme co-organised by HKCBA and EDB



The HKMA hosts a banking career session in the Life Planning Education Conference organised by the EDB



### Upskilling the industry's workforce Enhanced Competency Framework

The Enhanced Competency Framework (ECF) for Banking Practitioners is developed in collaboration with the banking industry and relevant professional bodies, providing a set of common and transparent competency standards required of the relevant professional areas in the banking sector. The ECF also provides a qualification framework for recognition of those practitioners who have completed the necessary training and assessment, and who have acquired relevant working experience. During 2022, a new ECF module on Compliance was launched to enhance the professional competencies of existing practitioners performing the compliance function. Another new module on Green and Sustainable Finance is also being developed to meet the rapidly growing demand for green and sustainable finance professionals in the banking industry. Up to the end of 2022, more than 17,000 banking practitioners had obtained certifications in various professional areas under the ECF.

## Pilot Scheme on Training Subsidy for Fintech Practitioners





In the 2022-23 Budget, the Financial Secretary announced the Pilot Scheme on Training Subsidy for Fintech Practitioners to promote the professional development of fintech talents and expand the fintech talent pool in Hong Kong. Under the Scheme, practitioners who have attained eligible fintech professional qualifications can receive reimbursement of up to 80% of the training costs. As the ECF on Fintech became the first set of fintech professional qualifications recognised under the Government's Qualifications Framework, the HKMA was commissioned by the Financial Services and the Treasury Bureau to launch the Scheme for the banking sector in September to increase incentives for banking practitioners to pursue professional development in fintech.

## Skills Transformation and Empowerment Programme

The HKMA launched the Skills Transformation and Empowerment Programme to provide support to the banking industry in driving the upskilling and reskilling of banking practitioners. Under the Programme, the HKMA conducted a thematic review of major banks' talent development practices to better understand their strategies and action plans to address future talent needs. The HKMA will share key observations and good practices with the industry for reference.



## Financial market infrastructures oversight

The PSSVFO empowers the Monetary Authority to designate and oversee clearing and settlement systems (CSSs) 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 CSSs:

- the Central Moneymarkets Unit;
- the Hong Kong dollar Clearing House Automated Transfer System (CHATS), including the Hong Kong dollar FPS;
- the US dollar CHATS;
- the euro CHATS;
- the renminbi CHATS, including the renminbi FPS; and
- the Continuous Linked Settlement (CLS) System.

The PSSVFO also provides statutory backing to the finality of settlement for transactions made through the designated CSSs by protecting the settlement finality from insolvency laws and any other laws.

The HKMA is also responsible for overseeing the Hong Kong Trade Repository (HKTR), the OTC derivatives trade repository in Hong Kong. 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, which is in line with one of the HKMA's functions to maintain the stability and integrity of the monetary and financial systems of Hong Kong.

#### Monitoring and assessment

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. In particular, the requirements under the Principles for Financial Market Infrastructures (PFMI)<sup>21</sup> are incorporated in the HKMA's guidelines for designated CSSs and the HKTR.

The HKMA 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.

The HKMA has been closely monitoring the operations of the FMIs under split team arrangements and the sufficiency and appropriateness of their contingency arrangements amid the evolving pandemic situation. The FMIs have also continued to strengthen their endpoint security and cyber resilience under the close monitoring of the HKMA.

In April 2012, the Committee on Payments and Market Infrastructures and IOSCO published the PFMI, which constitute the international standards for the oversight of FMIs, including systemically important payment systems, central securities depositories, securities settlement systems, central counterparties and trade repositories.



#### International participation

The HKMA is a member of the Committee on Payments and Market Infrastructures (CPMI) and participates in meetings, working groups and forums on FMI oversight matters. Throughout the year, the HKMA participated in CPMI meetings which, among other things, discussed issues related to enhancing cross-border payments as well as the application of oversight standards to stablecoin arrangements. It also participates in the CPMI-IOSCO Implementation Monitoring Standing Group, which is responsible for monitoring and assessing the implementation of the PFMI by different jurisdictions.

The HKMA is also a member of the Oversight Forum of the financial messaging services provider SWIFT. This forum 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 2022, the HKMA attended meetings and teleconferences to discuss matters of interest, in particular SWIFT's customer security framework and cybersecurity issues.

The HKMA participates in the international co-operative oversight of the CLS System<sup>22</sup> through the CLS Oversight Committee. During 2022, the HKMA attended various meetings of the CLS Oversight Committee to discuss operational, developmental and oversight matters.

In addition, the HKMA has established co-operative oversight arrangements with other relevant authorities, both at the domestic and international levels, to foster efficient and effective communication and consultation. This enables the HKMA and these other authorities to support one another in fulfilling their respective mandates with respect to FMIs.

#### Independent tribunal and committee

An independent Process 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 CSSs. The Committee held two meetings and reviewed four regular reports and 36 accompanying oversight activities management reports in 2022. 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.

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 have been no appeals since the establishment of the Tribunal.

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 basis.