

# International Financial Centre

Global economic growth was uneven in 2014, with a diverging pace of recovery across advanced economies and a general moderation in emerging economies. Emerging markets experienced higher volatility in the second half of the year amid a rapid strengthening of the US dollar, and net oil exporters among them were further hit by the sharp decline in oil prices. So far, emerging Asia has been less affected given its stronger fundamentals and investor differentiation of risks. But the outlook remains highly uncertain. The HKMA continued to participate in international and regional forums to contribute to global macroeconomic and financial market surveillance and the implementation of global financial regulatory reforms in a co-ordinated manner. Hong Kong's role as the premier hub for renminbi business consolidated further as renminbi activities expanded globally. Hong Kong's strong credit standing and robust fiscal performance continued to be recognised by credit rating agencies — Standard & Poor's maintained its top-rated AAA rating for Hong Kong.

## OVERVIEW

The scale of clearing and settlement activities reached new highs in 2014 as the safe and efficient operation of Hong Kong's financial infrastructure, and its continued development, reinforced the city's competitive edge as a premier offshore renminbi business centre and an international financial centre. Indeed, the robustness of Hong Kong's financial infrastructure was confirmed by the International Monetary Fund in its Financial Sector Assessment Program (FSAP) report released in May. The report recognised that Hong Kong had developed a set of sophisticated multi-currency financial market infrastructure which was supported by effective oversight.

The HKMA actively contributes to international discussions on issues of significance to global and regional financial stability. In 2014, the HKMA joined the South-East Asian Central Banks (SEACEN) group, an important training and research centre for central banks in the region. It continued to chair the Monetary and Financial Stability Committee established under the Executives' Meeting of East Asia-Pacific Central Banks (EMEAP).<sup>1</sup> The Committee reviews economic and financial developments in the Asia-Pacific region, discusses areas of common interest and, where appropriate, reflects common views. The HKMA also took part in various meetings of multilateral organisations, notably the Financial Stability Board (FSB)<sup>2</sup> which plays the leading role in the reform of the international financial system. In addition, the HKMA continued to work closely with ASEAN+3<sup>3</sup> authorities to strengthen the operations of the ASEAN+3 Macroeconomic

Research Office — an independent regional surveillance unit established to monitor and analyse regional economies and support decision making of the Chiang Mai Initiative Multilateralisation (CMIM)<sup>4</sup>.

The development of Hong Kong as the premier offshore renminbi business centre was enhanced in 2014 with the pool of renminbi deposits expanding significantly, particularly following the removal in November of the renminbi conversion limit for Hong Kong residents. Renminbi activities ranging from trade settlement, bond issuance, bank lending to payment and settlement all recorded solid growth. The continued expansion of cross-border renminbi fund flows with the Mainland, especially with the launch of the Shanghai-Hong Kong Stock Connect, is expected to further propel the development of offshore renminbi business in Hong Kong.

During the year, different components of the financial infrastructure operated smoothly. In October, the cut-off time for the renminbi settlement service in Hong Kong was further extended, facilitating timely cross-border payments through Hong Kong's renminbi settlement platform. In addition, the Central Moneymarkets Unit (CMU) system was enhanced in late 2014 to enable eligible participants to initiate renminbi intraday and overnight repo transactions with the HKMA through CMU member terminals. A new phase of the trade repository for over-the-counter (OTC) derivatives was launched in September to expand its product scope, which has enabled Hong Kong to keep pace with major overseas market reforms in the OTC derivatives market.

<sup>1</sup> EMEAP is a co-operative forum of 11 central banks and monetary authorities in the East Asia and Pacific region, comprising the Reserve Bank of Australia, the People's Bank of China, the Hong Kong Monetary Authority, Bank Indonesia, the Bank of Japan, the Bank of Korea, Bank Negara Malaysia, the Reserve Bank of New Zealand, Bangko Sentral ng Pilipinas, the Monetary Authority of Singapore and the Bank of Thailand.

<sup>2</sup> The FSB was established in April 2009 as the successor to the Financial Stability Forum to address vulnerabilities in global financial systems, and to develop and promote implementation of effective regulatory, supervisory and other policies in the interest of financial stability. Its membership comprises senior representatives of national financial authorities (central banks, regulatory and supervisory authorities and ministries of finance), international financial institutions, standard-setting bodies, and committees of central bank experts.

<sup>3</sup> ASEAN+3 comprises the 10 ASEAN member countries (Brunei, Cambodia, Indonesia, Lao PDR, Malaysia, Myanmar, the Philippines, Singapore, Thailand and Vietnam), together with the Mainland, Japan and Korea.

<sup>4</sup> The CMIM is a regional mechanism effective in March 2010 to provide short-term US dollar support to participants facing liquidity shortages. In May 2012, the facility was enhanced by doubling the access fund to US\$240 billion and introducing a crisis prevention facility.

# International Financial Centre

## REVIEW OF 2014

### International and regional co-operation

With increased connections among global financial markets, the HKMA proactively fostered co-operation with other jurisdictions in promoting sustainable economic growth and financial system stability through various international and regional forums including the FSB, the Bank for International Settlements (BIS) and the Asia-Pacific Economic Co-operation (APEC). The HKMA also continued to implement global financial regulatory reforms, including the recommendations of the G20, to help strengthen the resilience of the global financial system.

The HKMA co-chaired a workshop in Hong Kong in June, which was jointly organised by the Committee on the Global Financial System (CGFS)<sup>5</sup> and the FSB Standing Committee on Assessment of Vulnerabilities (SCAV)<sup>6</sup>. The workshop discussed current risks affecting corporate balance sheets in emerging markets, identified relevant data gaps and provided recommendations on how to address them. The workshop was attended by representatives from 28 central banks, finance ministries and international financial institutions, as well as representatives from private sector firms.

### Promoting monetary and financial stability in Asia

The HKMA was admitted as a new member of SEACEN in November. It is a grouping of 20 central banks and monetary authorities in the Asia-Pacific region with a focus on research and training. By joining SEACEN, the HKMA hopes to strengthen ties with the member central banks, particularly on research and training, thereby contributing to financial and monetary stability in Hong Kong and the region.

The HKMA maintained its commitment to existing regional co-operative initiatives to promote financial stability in Asia and to harness the region's collective voice in international financial affairs. As Chair of the EMEAP Monetary and Financial Stability Committee, the HKMA held regular meetings and ad hoc teleconferences with Committee members to review major economic and financial market developments. It continued to prepare the Committee's half-yearly Macro-Monitoring Report to assess the region's risks and vulnerabilities and the policy implications. Private sector participants were invited to the Committee's meeting to exchange views with members on risks related to corporate leverage in Asia. Research studies were conducted on the impact on EMEAP economies of the eventual exit from unconventional monetary policies by advanced economies. The Committee also monitored the impact of the global financial regulatory reforms on Asian markets, such as the reforms on the OTC derivatives market and financial benchmarks, and facilitated the formulation of a collective regional view on issues of concern as part of its contribution to the international discussions. As one of the Deputy Chairs of the EMEAP Working Group on Payment and Settlement Systems in the first half of 2014, and the Chair since mid-2014, the HKMA worked closely with the former Chair, the People's Bank of China (PBoC), and other Deputy Chairs to co-ordinate the Working Group's effort in sharing experiences and exchanging information on risk management, oversight, standards and best practices, and developments in domestic and cross-border payment and settlement systems. The HKMA also led the Working Group's sub-group on cross-border co-operation and development.

In October, the Financial Secretary, representing the Government of the Hong Kong Special Administrative Region, signed an Agreement together with ASEAN+3 authorities to upgrade the ASEAN+3 Macroeconomic Research Office to an international organisation to support its pivotal role under the enhanced CMIM.

### Hong Kong's sovereign credit ratings

The HKMA maintained close dialogue with international credit rating agencies to present a balanced assessment of Hong Kong's economic performance and fiscal strength. These efforts contributed to the affirmation of Hong Kong's sovereign credit ratings by all major credit

<sup>5</sup> The CGFS is one of the standing committees supported by the BIS with a mandate to monitor and examine broad issues relating to financial markets and the global financial system.

<sup>6</sup> The SCAV is a standing committee under the FSB to identify and assess macro-financial related risks and vulnerabilities in the financial system.

rating agencies in 2014. In particular, Standard & Poor's affirmed its highest AAA rating for Hong Kong, reflecting the agency's recognition of Hong Kong's above-average growth prospects, sizable fiscal reserves, consistently healthy fiscal performance and strong net external asset position. Moody's Investors Service and Fitch Ratings also maintained Hong Kong's ratings at Aa1 and AA+ respectively, just one notch below triple-A.

### Development of Hong Kong as the offshore renminbi business centre

The HKMA continued to work with the industry to strengthen Hong Kong's renminbi financial platform and promote collaboration on renminbi business with overseas markets. It also liaised with Mainland authorities on broadening channels for renminbi fund flows between the onshore and offshore markets.

The HKMA's efforts in engaging Mainland authorities on relevant policy issues contributed to important breakthroughs during the year. The Shanghai-Hong Kong Stock Connect was launched on 17 November, allowing overseas investors to invest in the Mainland A-share market through Hong Kong, and Mainland investors to trade Hong Kong shares through Shanghai. This was a milestone in the liberalisation of the Mainland's capital account, opening up a new channel for the cross-border use and circulation of renminbi. Starting from the same day, banks may conduct renminbi conversions with Hong Kong residents without applying limits. Under the new arrangement, banks square their positions arising from renminbi conversions conducted with Hong Kong residents in the offshore market instead of the onshore market. The removal of the conversion limit facilitates Hong Kong residents to participate in the Shanghai-Hong Kong Stock Connect and other renminbi financial transactions.

The HKMA introduced several measures to strengthen Hong Kong's market infrastructure for offshore renminbi business development. In October, seven banks were designated as Primary Liquidity Providers (PLPs) for a term of two years. With access to a dedicated repo facility provided by the HKMA, the designated PLPs pledged to expand their market-making activities in Hong Kong for various offshore market instruments, and to use Hong Kong as a platform in promoting their global offshore

renminbi business. In November, the HKMA started offering intraday renminbi funds of up to RMB10 billion to authorized institutions participating in renminbi business in Hong Kong to assist them in managing their renminbi liquidity and to promote efficient payment flows in Hong Kong. In the same month, the HKMA and the PBoC renewed a RMB400 billion (HK\$505 billion) currency swap agreement for another three-year term. The renewal will help the HKMA provide liquidity, when necessary, to maintain the stability of the offshore renminbi market in Hong Kong.

Hong Kong continued to expand its collaboration on renminbi business with other economies, with the HKMA facilitating the second meeting of the private sector dialogue with Australia in May and the fourth meeting with London in November. In October, the newly established Hong Kong-Thailand Renminbi Business Forum met for the first time. At the same time, the HKMA signed a Memorandum of Understanding with Banque de France to enhance co-operation on renminbi business development between Hong Kong and Paris. Through these initiatives, banks in Hong Kong strengthened their renminbi business links with their overseas counterparts and clients. Steps were also taken to increase corporate awareness of renminbi business opportunities, facilitate transfer of liquidity between different markets and provide better support for cross-market renminbi investment opportunities.



Deputy Chief Executive of the HKMA, Mr Eddie Yue (middle), moderates a panel discussion at the Second Hong Kong-Australia RMB Trade and Investment Dialogue on 22 May 2014.

## International Financial Centre

Outstanding renminbi customer deposits and certificates of deposit

increased by 10% to

**RMB1,158** billion

Renminbi trade settlement transactions handled by Hong Kong banks

increased by 63% to

**RMB6,258** billion

Issuance of renminbi bonds increased by 69% to

**RMB197** billion

During 2014, outstanding renminbi customer deposits and certificates of deposit increased by 10% to RMB1,158 billion. Renminbi trade settlement transactions handled by banks in Hong Kong expanded by 63% to RMB6,258 billion. Renminbi financing activities expanded notably, with the issuance of renminbi bonds in Hong Kong amounting to RMB197 billion, 69% more than the total in 2013. The outstanding amount of renminbi bonds increased by 23% to RMB381 billion at the end of 2014. The outstanding amount of renminbi bank loans also increased by 63% to RMB188 billion. On an average day during the year, the amount of offshore renminbi foreign exchange spot and forward transactions in Hong Kong rose to some US\$30 billion equivalent, 50% higher than in 2013.

Hong Kong's renminbi RTGS system continued to support the rapid growth in the use of renminbi for financial transactions around the world. Daily turnover exceeded RMB800 billion in December, with around 90% of the transactions conducted in the offshore market. At the end of 2014, 225 banks were participating in Hong Kong's renminbi clearing platform, of which 200 were subsidiaries and branches of overseas banks or the overseas presence of Mainland banks. According to SWIFT statistics, banks in Hong Kong handled some 70% of the renminbi payments conducted with the Mainland and among the offshore markets globally.

### CEPA

A new agreement to achieve basic liberalisation of trade in services between Guangdong and Hong Kong was signed in December under the framework of the Closer Economic Partnership Arrangement (CEPA). Pursuant to the new agreement, national treatment is in principle accorded to Hong Kong banks in Guangdong Province, except for differential requirements or restrictions that will be retained by way of a negative list. This will potentially provide more flexibility for Hong Kong banks to conduct business in Guangdong. In addition, the new agreement has provided for the affirmation of the established agreements on mutual recognition of banking professional qualifications, and continued efforts in promoting and expanding such arrangements.

### Training

During the year, training programmes were conducted for officials from the PBoC, the State Administration of Foreign Exchange and the China Banking Regulatory Commission. These courses covered topics such as cross-border renminbi businesses, global and regional financial developments and reforms, bank risk management and compliance with regulatory requirements, consumer protection, interest rate liberalisation and financial innovation. Introductory sessions on the local banking scene and the HKMA's work were conducted for delegations from Mainland municipal governments and financial regulatory agencies. The HKMA also co-hosted a training seminar on Capital Planning and Stress Testing in Hong Kong with the Asian Development Bank, which was attended by participants from 13 APEC member economies.

### Government Bond Programme (GBP)

The HKMA arranged nine tenders of institutional government bonds during the year amounting to \$20.8 billion. By the end of 2014, the total amount of outstanding institutional bonds was \$66.5 billion.

The HKMA completed a review of the local Hong Kong dollar bond market and announced in December the introduction of measures to enhance long-term development of the GBP and the Exchange Fund Bills and Notes Programme. First, the tenors of bonds issued under the two programmes were streamlined. Starting from 2015, the HKMA is only issuing new institutional government bonds with tenors of three years and above, and Exchange Fund papers with tenors of two years and below. With the cessation of any new issuance of Exchange Fund papers of three years and above, the amount of new issuances of government bonds is being increased to meet investors' demand for longer-term high-quality Hong Kong dollar bonds. As a result, the longest tenor of government bonds to be issued will be extended from 10 to 15 years. Secondly, since 15 December 2014, the HKMA has been providing a discount facility for government bonds to give banks greater flexibility to manage their liquidity. The facility provides up to a total of \$10 billion overnight liquidity against a sale and repurchase of government bonds.

Following the Government's 2014-15 Budget, the HKMA arranged in August the issuance of \$10 billion 3-year inflation-linked retail bonds (iBonds) to Hong Kong residents. It was the fourth consecutive series of iBonds issued since 2011, with the first series having matured in July 2014. The latest issue attracted over 488,000 applications with investment monies approaching \$30 billion. The amount of retail bonds outstanding at the end of the year was \$30 billion.

Inaugural issuance of  
US\$1 billion Government sukuk  
attracted order book size of over

US\$4.7 billion

### Development of Islamic finance

To stimulate the further development of the Islamic bond (sukuk) market in Hong Kong, an inaugural US\$1 billion 5-year Government sukuk was successfully launched in September 2014 under the GBP.

The HKMA acted as the Government's representative in the offering, which marked the world's first US dollar-denominated sukuk originated by an AAA-rated government. It attracted strong demand from global investors, as evidenced by a significant order book size of over US\$4.7 billion. The offer was priced at 2.005% (23 basis points over 5-year US Treasuries), representing the tightest spread ever achieved on a benchmark US dollar issuance from an Asian (excluding Japan) government and setting an important new benchmark for Hong Kong and the region. The sukuk was launched following an intensive roadshow covering the Middle East, Malaysia, Hong Kong, Singapore, London and New York.

The inaugural issuance of sukuk signified an important milestone in the development of the Islamic capital market in Hong Kong, and its success proved that the issuance of sukuk using Hong Kong's platform was a viable fund-raising option and widely accepted by investors around the world. It also received international acclaims, including such awards as the Best Islamic Financing Award from *FinanceAsia* and the Best Sovereign Bond Award from *GlobalCapital Asia/Asiamoney* for 2014.

# International Financial Centre

Throughout the year, the HKMA continued its efforts to strengthen ties with other Islamic financial centres and promote market knowledge and awareness of Islamic finance in Hong Kong. This included organising a number of Islamic finance conferences and seminars in collaboration with key Islamic financial centres, international Islamic organisations and local industry associations, which were well-received by the participants.

## Promotion of asset management business

Promoting Hong Kong's asset management industry and reinforcing its position as a leading asset management centre is an important task for the HKMA. This requires us to provide a favourable tax and regulatory environment for these businesses. In this regard, we maintained contact with the industry and relevant government agencies to assist in the formulation, review and implementation of policies to develop Hong Kong as a full service asset management hub. During 2014, the HKMA assisted the Government in preparing legislation to extend the offshore fund profits tax exemption to private equity funds, which aims to attract fund managers to expand their business in Hong Kong.

The HKMA visited asset owners, asset managers and service providers in major financial centres to highlight the latest developments in Hong Kong and to learn about their business plans for Asia. In seeking their views on potential hurdles for their operations in Hong Kong, the HKMA can know which areas of Hong Kong's financial platform could be further improved. These outreach meetings were held with private banking institutions, pension funds, mutual funds, private equity firms, hedge funds and fund administrators all over the world including Abu Dhabi, Beijing, Berlin, Boston, Dubai, Frankfurt, London, New York, San Francisco, Shanghai, Shenzhen and Singapore.

## OTC derivatives market regulation

The development of a regulatory regime for the OTC derivatives market in Hong Kong entered a new stage with the Legislative Council passage of the Securities and Futures (Amendment) Ordinance 2014 last March. The legislation was the result of several years of close collaboration between the HKMA, the Financial Services and the Treasury Bureau (FSTB) and the Securities and Futures Commission (SFC) to develop a framework which aimed at reducing systemic risk and enhancing transparency in the OTC derivatives market.

The Amendment Ordinance was gazetted in April and the HKMA and the SFC have been drafting the detailed rules for implementing the new framework. In July, a first round public consultation exercise was conducted on the draft detailed rules for the mandatory reporting and related record keeping obligations. In November, the HKMA and the SFC subsequently issued the conclusions of the consultation exercise. It is hoped the rules will be finalised in 2015 H1. The HKMA has engaged the industry during the process through a number of channels, including the OTC Derivatives Market Working Group under the Treasury Markets Association (TMA) and its sub-groups, and addressed specific regulatory and infrastructural issues. In addition, the HKMA participated in several international forums, including the OTC Derivatives Working Group, established under the FSB, and the OTC Derivatives Regulators' Forum, contributing to the relevant international initiatives and monitoring closely the international regulatory developments.

Close dialogue was also maintained with overseas regulators, through both bilateral and multilateral channels, to discuss cross-border issues arising from the implementation of the OTC derivatives reforms.

## Development of corporate treasury centres (CTC)

To encourage more multinational and Mainland enterprises to manage their global or regional treasury functions in Hong Kong, the Financial Secretary announced in the 2014-15 Budget the establishment of a task force to review the requirements under the Inland Revenue Ordinance for interest deductions in the taxation of corporate treasury activities, and to clarify the criteria for such deductions. The Financial Secretary announced in the 2015-16 Budget that the Government will amend the Inland Revenue Ordinance to allow, under specified conditions, interest deductions under profits tax for CTCs, and reduce profits tax for specified treasury activities by 50%. The HKMA is working with the FSTB and the Inland Revenue Department on the relevant bill, which will be introduced in the 2015-16 legislative session.

The HKMA is also consulting corporations, banks, and service providers through such organisations as the Corporate Treasury Development Working Group under the TMA, and arranging individual meetings to understand corporates' treasury operations and their views on Hong Kong's operating environment, as well as to market Hong Kong as a favourable regional destination for CTCs.

## Treasury Markets Association (TMA)

The HKMA collaborates and provides necessary strategic support to the TMA in developing Hong Kong's treasury markets. The TMA's goal is to raise market professionalism, facilitate market development, encourage the development of new markets and products, and strengthen Hong Kong's ties with the Mainland and financial centres around the world.

At the end of 2014, the TMA had 1,560 Individual Members and 85 Institutional Members from banks, investment houses, asset managers, money brokers, financial information services providers, exchanges and large corporations. During the year, the HKMA worked closely with TMA to accomplish several important tasks:

- **Reviewed the TMA's fixings** — Because of the latest international developments on financial benchmarks, the TMA conducted a review of its fixings. Following consultation with the market, a set of more quantitative criteria was used to identify the major players in the Hong Kong dollar and offshore renminbi interbank market in Hong Kong for appointment as contributors to the HKD and CNH HIBOR respectively. In addition, the fixings that were not used by the market were phased out.
- **Continued to perform the role of administrator for Hong Kong's financial benchmarks** — The TMA maintained close contact with benchmark administrators in other markets to keep abreast of the latest surveillance methodologies used by them, and to refine, as appropriate, the methodologies used in Hong Kong. The Surveillance and Governance Committee was updated regularly on the surveillance results.
- **Co-organised the Treasury Markets Summit with the HKMA** — The Summit, on Hong Kong's role as the global hub for offshore renminbi business, was held in September. The focus was on Hong Kong's role in supporting renminbi business in other financial centres, the positioning and strategies of Hong Kong in maintaining its status as a premier offshore renminbi business hub and international asset management centre, and the opportunities and challenges brought by the development of Hong Kong as a hub for CTC.



# International Financial Centre

## Hong Kong's financial infrastructure

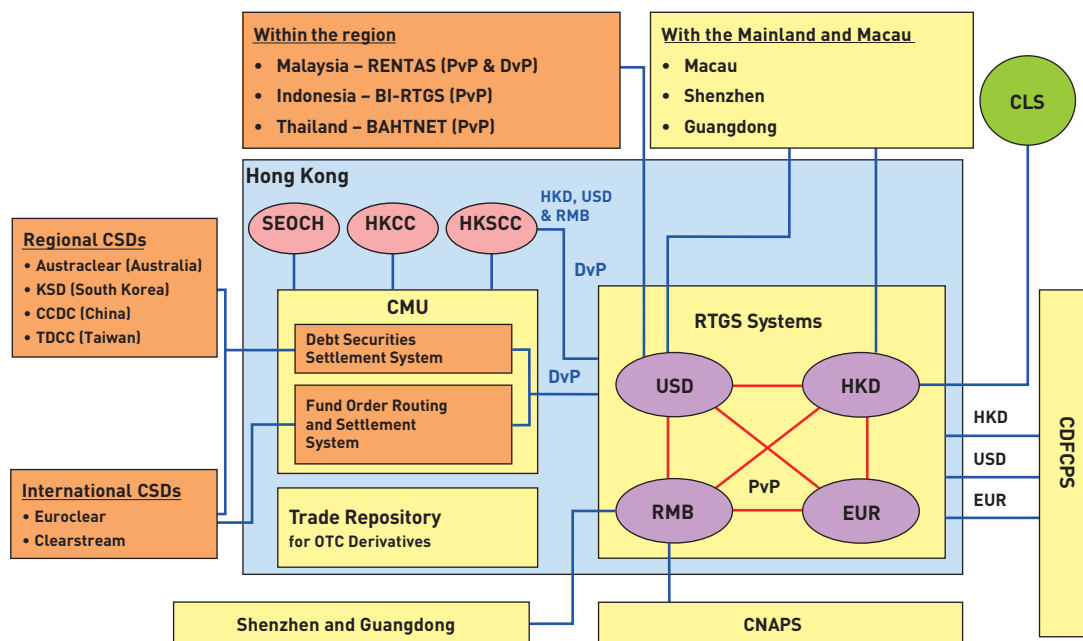
The HKMA plays a key role in developing Hong Kong's financial infrastructure to reinforce its status as a regional hub for payment and settlement of funds and securities. Each year, significant effort and resources are devoted to building a robust and efficient multi-currency, multi-dimensional platform, with extensive domestic and overseas system linkages (Chart 1).

Highlights include the establishment of RTGS systems for the Hong Kong dollar, the US dollar, the euro and the renminbi, and the development of bilateral links between the local RTGS systems and overseas RTGS systems, and between the CMU and regional and international Central Securities Depositories (CSDs), such as Euroclear, Clearstream, and the depositories in Australia, South Korea, the Mainland and Taiwan.

In response to industry demands and international developments, new components have been added to broaden the scope and increase the depth of Hong Kong's financial infrastructure. For example, an order routing and settlement system for investment funds was introduced in 2009, a trade repository for OTC derivatives was introduced in 2012, and retail payment infrastructure was introduced in 2013.

The infrastructure has been implemented in compliance with relevant international standards and best practices. Disclosure reports of Hong Kong's RTGS systems and the CMU were prepared and published in the second half of 2014, in accordance with the disclosure framework under the new international principles on financial market infrastructures jointly issued by the Committee on Payments and Market Infrastructures (CPMI) and the International Organization of Securities Commissions (IOSCO).

**Chart 1 Hong Kong's multi-currency payment and settlement infrastructure**



BAHTNET - Bank of Thailand Real Time Gross Settlement (Thailand's baht RTGS system)  
 BI-RTGS - Bank Indonesia Real Time Gross Settlement (Indonesia's rupiah RTGS system)  
 CCDC - China Central Depository & Clearing Co., Ltd. (settlement system for debt securities in China)  
 CDFPCS - China's Domestic Foreign Currency Payment System (RTGS system for foreign currency payment in China)  
 CLS - Continuous Linked Settlement (global multi-currency cash settlement system)  
 CMU - Central Money Markets Unit (settlement system for debt securities)  
 CNAPS - China National Advanced Payment System (renminbi RTGS system in China)  
 HKCC - HKFE Clearing Corp Ltd (central counterparty providing clearing and settlement for futures)  
 HKSCC - HK Securities Clearing and Co Ltd (operator of the clearing and settlement system for shares)  
 KSD - Korean Securities Depository (Korea's central securities depository)  
 RENTAS - Real Time Electronic Transfer of Funds and Securities (Malaysia's ringgit RTGS system)  
 SEOCH - SEHK Options Clearing House Ltd (central counterparty providing clearing and settlement for options)  
 TDCC - Taiwan Depository and Clearing Corporation (Taiwan's securities settlement system)

DvP - Delivery-versus-Payment  
 PvP - Payment-versus-Payment

### Hong Kong dollar RTGS System

The Hong Kong dollar Clearing House Automated Transfer System (CHATS), which operates on an RTGS basis, is responsible for clearing all Hong Kong dollar interbank payments. It continued to run smoothly and efficiently in 2014. It has a direct link with the CMU to provide delivery-versus-payment (DvP) settlement services. Hong Kong Interbank Clearing Limited (HKICL), the operator of the RTGS systems, was established in 1995 and is owned jointly by the HKMA and the Hong Kong Association of Banks (HKAB). In 2014, the HKICL processed a daily average of \$558 billion in CHATS transactions (26,134 items), compared with \$507 billion (25,034 items) in 2013.

In addition to settling large-value payments, CHATS also handles daily bulk clearings of stock market transactions, MPF schemes' switching transactions, credit card transactions, cheques, small-value bulk electronic payment items (EPS, auto-credit and auto-debit transactions) and automatic teller machine transfers (Chart 2).

Banks can use their Exchange Fund Bills and Notes (EFBN) to obtain interest-free intraday liquidity through intraday repo transactions with the HKMA to settle their interbank payments.

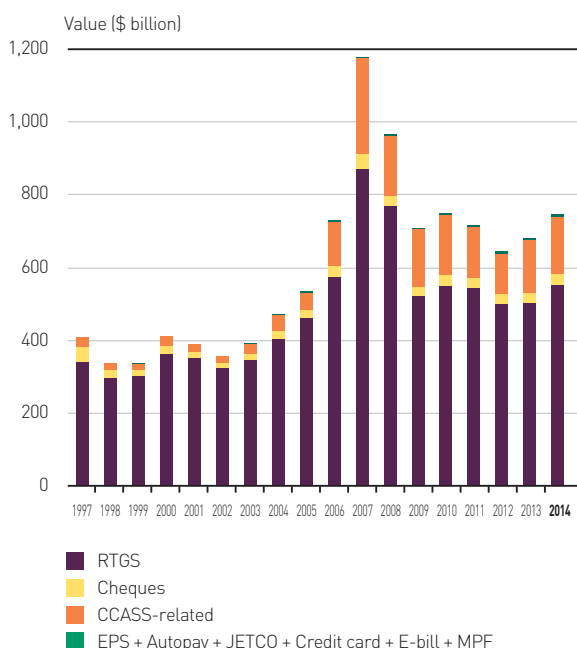
### Foreign currency RTGS systems in Hong Kong

The US dollar, euro and renminbi RTGS systems all operated smoothly. Amid the rapid expansion of renminbi business in Hong Kong, the average daily turnover of the renminbi RTGS system recorded exceptional growth in 2014, rising to a daily average of RMB733 billion, nearly double the 2013 daily average of RMB395 billion. Indeed, the momentum accelerated faster in the latter part of the year with the daily average reaching RMB888 billion in December. When compared with the growth of renminbi deposits in Hong Kong, turnover in the renminbi RTGS system has been much faster, suggesting the RTGS system in Hong Kong is increasingly catering for large value money market transactions.

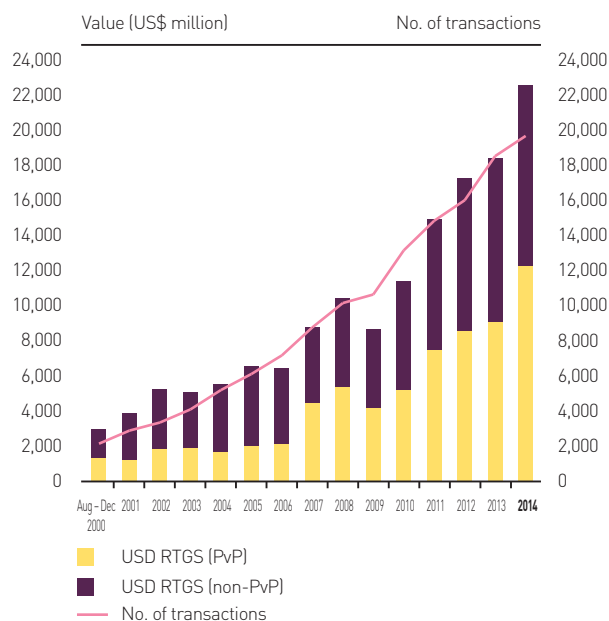
The extension of the operating hours of the renminbi RTGS system since June 2012 has been well received by the banking sector. The average daily value of the transactions processed during the extended window, from 6:30 p.m. to 11:30 p.m., grew significantly from RMB4.5 billion in 2013 to RMB22.3 billion in 2014. It has come on the back of the development of renminbi business globally and the continuous momentum in the internationalisation of the renminbi.

The average daily turnover and other details of the foreign currency RTGS systems are listed in Charts 3-5 and Table 1.

**Chart 2** Hong Kong dollar RTGS system average daily turnover

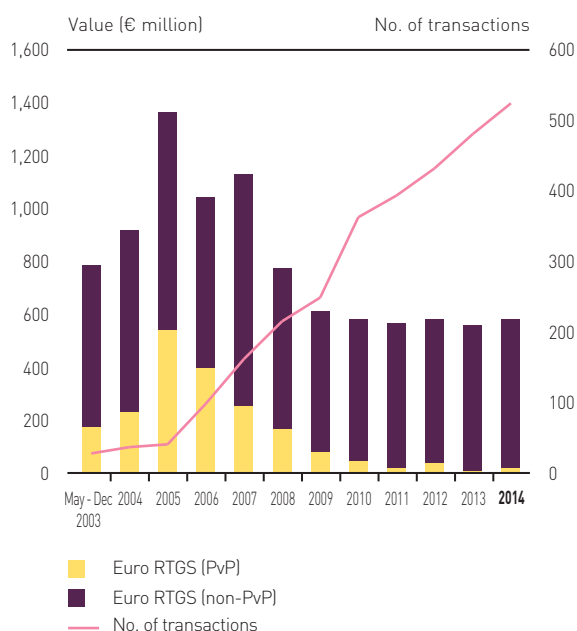


**Chart 3** US dollar RTGS system average daily turnover

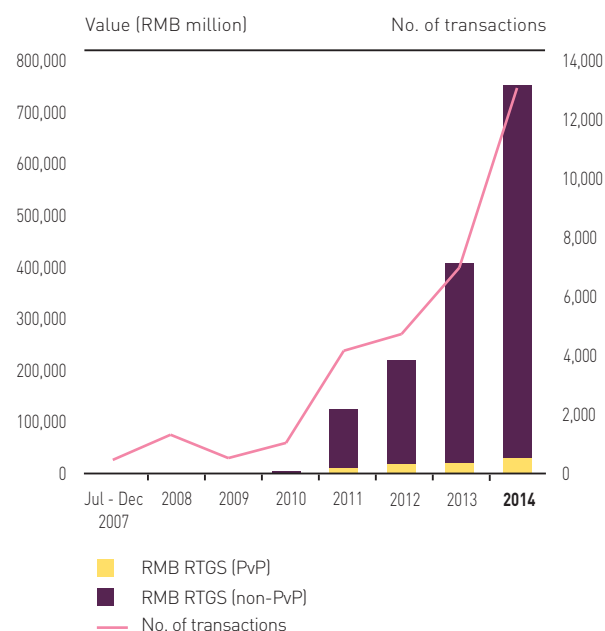


# International Financial Centre

**Chart 4 Euro RTGS system average daily turnover**



**Chart 5 Renminbi RTGS system average daily turnover**



**Table 1 Foreign currency RTGS systems**

RTGS systems	Launch date	Settlement institution or Clearing Bank	Number of participants at the end of 2014	Average daily turnover in 2014	Average daily transactions in 2014
US dollar RTGS system	August 2000	The Hongkong and Shanghai Banking Corporation Limited	Direct: 100 Indirect: 122	US\$22.2 billion	19,347
Euro RTGS system	April 2003	Standard Chartered Bank (Hong Kong) Limited	Direct: 37 Indirect: 18	€585.0 million	529
Renminbi RTGS system	June 2007	Bank of China (Hong Kong) Limited	Direct: 199*	RMB732.7 billion	12,717

\* Referring to those that have completed the registration of direct membership for the renminbi RTGS system among over 220 participating banks that have signed the Clearing Agreement with the Clearing Bank.

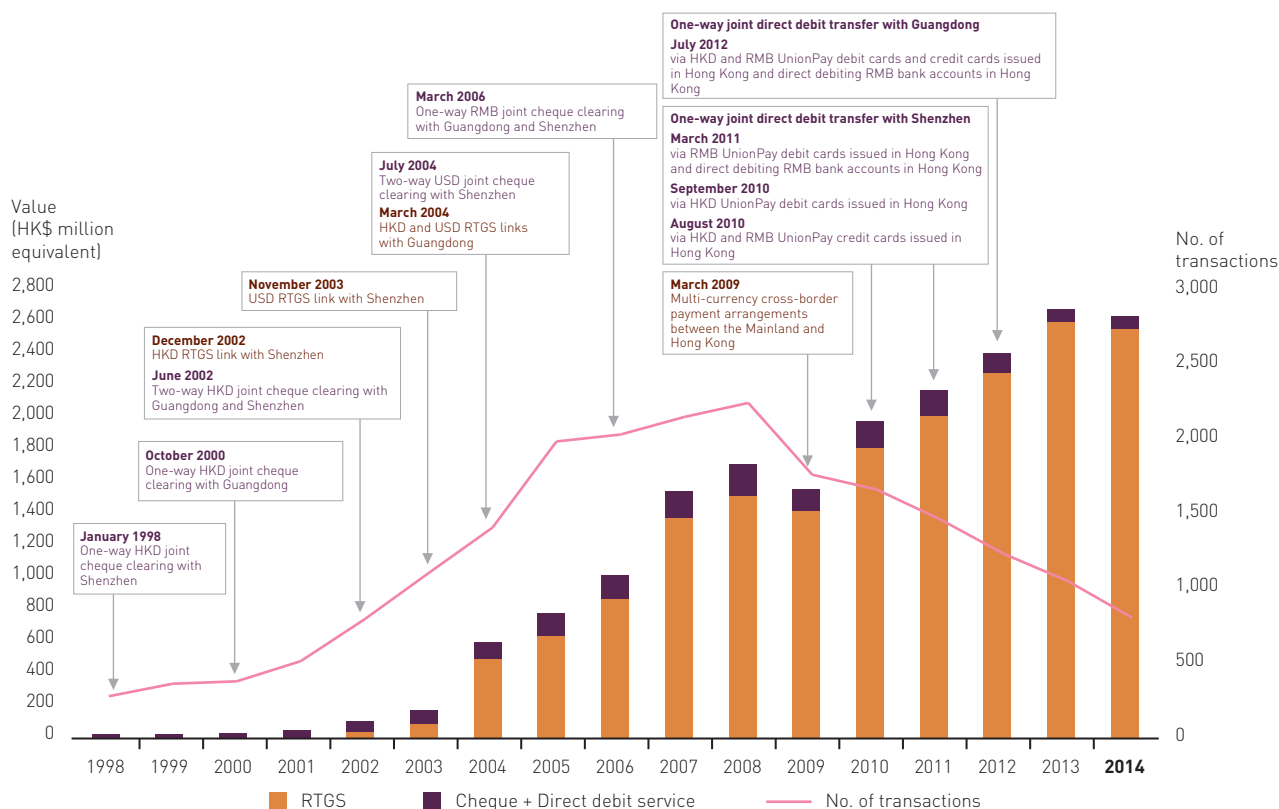
## Payment-versus-payment (PvP)

PvP is a mechanism for settling a foreign exchange transaction to ensure that payments in the two currencies involved are settled simultaneously. Within Hong Kong, six cross-currency PvP links have been established among the Hong Kong dollar, US dollar, euro and renminbi RTGS systems. Hong Kong's US dollar RTGS system has also established three cross-border PvP links, with Malaysia's ringgit RTGS system (2006), Indonesia's rupiah RTGS system (2010) and Thailand's baht RTGS system (2014). PvP greatly improves settlement efficiency and eliminates settlement risk arising from time lags in settlements and from time-zone differences (known as Herstatt risk). In 2014, the transaction value of Hong Kong dollar, US dollar, euro and renminbi-related PvP transactions amounted, respectively, to about HK\$5,111 billion, US\$2,838 billion, €4 billion and RMB6,532 billion.

## Payment links with the Mainland

The HKMA continues to work closely with Mainland authorities in providing efficient cross-border payment links to meet the growing demands. In 2014, the average daily turnover handled by the various system links was equivalent to \$2.6 billion, including the RTGS cross-border links with the Mainland's Domestic Foreign Currency Payment Systems launched in 2009 (Chart 6). The RTGS system links with Shenzhen and Guangdong handled more than 20,000 transactions during the year, with a total value equivalent to \$597 billion. The system allows cross-border payments in Hong Kong dollars and US dollars to be settled efficiently and safely between banks in Hong Kong and their counterparts in Shenzhen and Guangdong.

**Chart 6** Average daily turnover in cross-border arrangements with the Mainland



# International Financial Centre

The two-way joint cheque-clearing facilities processed about 166,000 Hong Kong dollar and US dollar cheques in 2014, with a value equivalent to \$16 billion. The facilities shorten the clearing time for cheques drawn on banks in Hong Kong and presented in Shenzhen and Guangdong, and for cheques drawn on banks in Shenzhen and Guangdong and presented in Hong Kong. Since March 2006, the joint cheque-clearing facilities have been expanded to cover renminbi cheques drawn on banks in Hong Kong, and presented in Shenzhen and Guangdong for consumer spending. In 2014, renminbi cheques with a total value equivalent to around \$5 million were cleared.

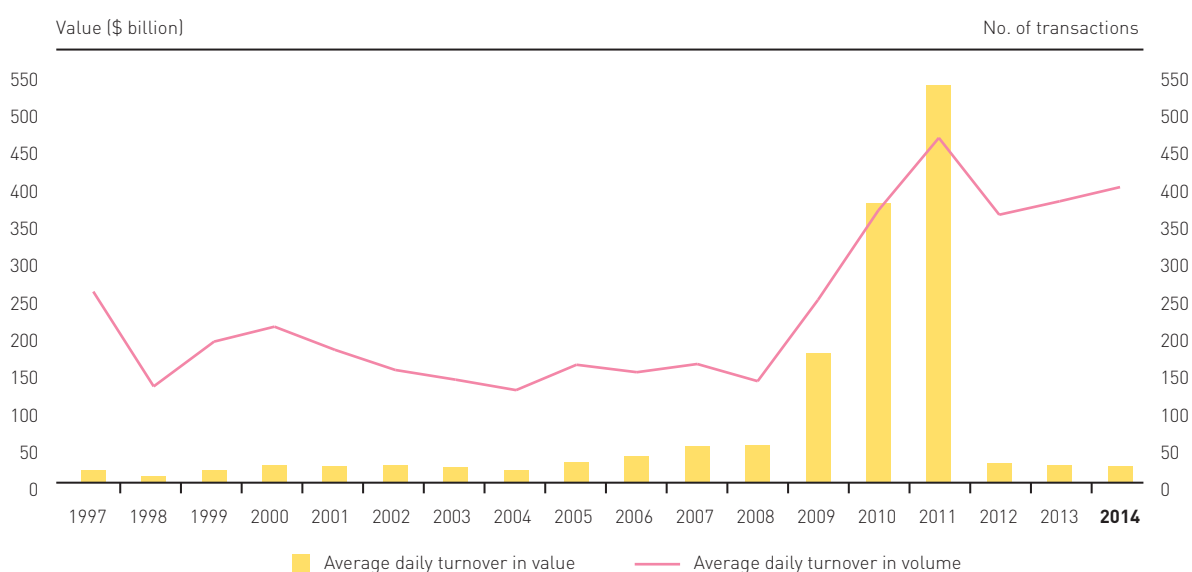
## Payment links with Macau

The one-way joint clearing facility for Hong Kong dollar cheques between Hong Kong and Macau was launched in August 2007 and a similar facility for US dollar cheques was launched in June of the following year. The facilities have reduced the time required for clearing Hong Kong dollar and US dollar cheques issued by banks in Hong Kong and presented in Macau from four or five days to two days. In 2014, Hong Kong dollar cheques with a total value of about \$21 billion and US dollar cheques with a total value of about US\$25 million were cleared.

## Debt settlement systems

The CMU provides an efficient, one-stop clearing, settlement and depository service for Hong Kong dollar and foreign currency-denominated debt securities issued in Hong Kong. Through the linkages between the CMU and international and regional CSDs, investors outside Hong Kong can hold and settle securities lodged with the CMU, while Hong Kong investors are able to hold and settle foreign securities held with CSDs outside Hong Kong. In 2014, the CMU processed an average daily value of \$22 billion (396 transactions) in secondary market transactions (Chart 7). Among the debt securities lodged with the CMU at the end of the year, the outstanding amount of EFBNs was \$753 billion and the total amount of other debt securities was equivalent to \$1,075 billion, of which renminbi debt securities amounted to RMB407 billion.

**Chart 7** CMU secondary market turnover



### Financial infrastructure development

The HKMA completed a number of projects in 2014 to improve the safety and efficiency of Hong Kong's financial infrastructure, and to capture new business opportunities.

### Operating hours of Hong Kong's renminbi payment service extended and enhanced provision for renminbi liquidity

To reinforce Hong Kong's role as a premier offshore renminbi centre, the operating window of Hong Kong's renminbi RTGS system was further extended in 2014, following the extension in 2012. The cut-off time of the renminbi settlement platform, as well as the cross-border renminbi payment service between Hong Kong and the Mainland, was extended in October to 5:00 a.m. the next day (Hong Kong time), providing a total of 20.5 hours for same-day value payments. The extension allows financial institutions in other parts of the world a much longer operating window to settle offshore and cross-border renminbi payments through Hong Kong's infrastructure. In November, the renminbi RTGS system was enhanced to facilitate the HKMA's provision of renminbi liquidity to the system through intraday and overnight repo transactions with eligible participants.

### New cross-border Pvp link established between Hong Kong and Thailand

Following close co-operation between the HKMA and the Bank of Thailand, the linkage between Hong Kong's US dollar RTGS system and Thailand's baht RTGS system was launched in July. The link can help Thai banks better manage the settlement risk of their US dollar and Thai baht (THB) foreign exchange transactions, and enhance settlement efficiency. Banks in Hong Kong can find new correspondent banking opportunities with Thai banks, thereby reinforcing Hong Kong's status as a regional payment hub. It is the third cross-border Pvp link extended from Hong Kong's US dollar RTGS system.



Deputy Chief Executive of the HKMA, Mr Peter Pang (right), and Deputy Governor of Bank of Thailand, Mr Krirk Vanikkul, host the launch ceremony of the USD-THB Pvp link in Hong Kong on 28 July 2014.

# International Financial Centre

## ***Intraday liquidity monitoring indicators***

The Basel Committee on Banking Supervision (BCBS) issued a paper in April 2013 on *Monitoring Tools for Intraday Liquidity Management*, which requires banks to start reporting indicators on their intraday liquidity positions in 2015. The RTGS systems were enhanced in November 2014 to produce the relevant indicators to banks based on information available in the systems to support the implementation of the BCBS requirement.

## ***Pan-Asian CSD Alliance projects***

In addition to cross-border collateral management co-operation with Euroclear and J.P.Morgan, the collateral management service with Clearstream was launched in August 2014. The HKMA continues to work with global tripartite repo system operators and international CSDs to further enhance the repo market in Hong Kong.

The development of a centralised corporate action platform progressed as planned. The platform, scheduled to be launched in the second half of 2016, aims to automate and streamline the processing of corporate events of debt securities lodged with the CMU.

## ***E-Payment for MPF transfer system***

The HKMA and the Mandatory Provident Fund Schemes Authority jointly launched the e-payment for MPF transfer system in June. Making use of the CMU, the new e-payment service automates and significantly shortens the time taken to transfer Mandatory Provident Fund (MPF) accrued benefits between trustees of MPF schemes, thereby enhancing the accuracy and efficiency of the transfer process.

## ***Investment funds mutual recognition programme***

Following the launch of the Hong Kong-Shanghai Stock Connect in November, the HKMA initiated discussions with relevant authorities and industry stakeholders in both Hong Kong and on the Mainland. They aimed at exploring possible infrastructure linkages between the HKMA's CMU fund order routing platform and the related platform on the Mainland to prepare for the upcoming Hong Kong-Mainland investment fund mutual recognition programme.

## ***CMU Central Bank Placement Co-ordinating Window***

The HKMA's CMU Central Bank Placement Co-ordinating Window was again used by the Ministry of Finance for a placement of RMB2 billion offshore renminbi sovereign bonds on 21 May. The placement attracted a total subscription of RMB3.27 billion from overseas central banks and monetary authorities. Separately, and also through the HKMA's CMU bond tendering platform, the Ministry of Finance issued two batches of offshore renminbi sovereign bonds to institutional investors on 21 May and 20 November, worth RMB14 billion and RMB9 billion respectively. The increased acceptance of renminbi sovereign bonds helped expand the investor base for the offshore renminbi bond market and reinforced the role of Hong Kong as the global hub for offshore renminbi business.

## ***New support for renminbi repo transactions***

The CMU system was also enhanced in late 2014 to enable eligible CMU participants to conduct renminbi intraday and overnight repo transactions with the HKMA and initiate such transactions through CMU member terminals.

## ***Trade repository for OTC derivatives***

The second phase of the development of the local trade repository for OTC derivatives was completed in September. This phase supports the remaining most commonly traded interest rate and foreign exchange derivatives products as well as introduces equity derivatives products. Preparations were also made to support the impending commencement of mandatory reporting under the new regulatory regime for the OTC derivatives market in Hong Kong. The HKMA continued to participate in international forums and working groups on reporting standards for trade repositories to keep in view the relevant developments and ensure the local trade repository will meet international standards and best practices.

### ***Retail payment initiatives***

Throughout the year, the HKMA continued its efforts to improve Hong Kong's retail payment infrastructure. The initiatives and their progress are summarised below.

#### ***Implementation of the electronic bill presentment and payment (EBPP) system***

Banks have continued to recruit merchants to join the EBPP service since the system was launched in December 2013. One year on and the number of participating merchants had increased to 112, covering financial institutions, schools, property management companies, telecommunications operators and charity organisations. The HKMA has also supported major government billing departments in their efforts to issue bills through the EBPP platform. In addition, with the assistance of a system operator on the Mainland, the first phase of a cross-border EBPP service became available in December allowing Mainland residents to pay bills issued by Hong Kong merchants. Subsequent phases will enable Hong Kong residents to pay bills issued by Mainland merchants.

#### ***Development of e-cheque***

The development of the e-cheque clearing platform and the centralised presentment portal has progressed as planned. Some 17 banks have expressed interest in offering the e-cheque service to their customers and a three-month pilot scheme is scheduled to start in December 2015. The e-cheque service will help reduce costs incurred with the manual processing of paper cheques, remove the need for physical delivery and presentment, and make the payment process safer through enhanced security features. To give e-cheques the same legal status as paper cheques, the HKMA assisted in drafting amendments to Schedule 1 of the Electronic Transactions Ordinance. The amended order becomes effective on 1 April 2015.

#### ***Near Field Communication<sup>7</sup> (NFC) mobile payment***

The HKMA continued to promote the awareness of NFC mobile payment to the industry and the public in Hong Kong. By the end of 2014, seven banks and a non-bank stored value card issuer had launched the NFC mobile payment service, taking into account the Best Practice for NFC Mobile Payment standards jointly developed by the HKMA and the HKAB. A technology breakthrough was also achieved in December which allows multiple payment cards, issued by different banks, to be stored on a single smart phone. In another development, an electronic funds transfer company completed the implementation of an interoperable infrastructure to enable more banks to participate in the provision of NFC mobile payment services to their customers.

#### ***New regulatory regime for stored value facilities (SVF) and retail payment systems (RPS)***

The HKMA, the FSTB and the Department of Justice completed the drafting of the proposed legislative amendments to the Clearing and Settlement Systems Ordinance (CSSO) for the implementation of a regulatory regime for SVF and RPS. The proposed legislation seeks to empower the HKMA to implement a licensing regime for SVF and a designation regime for RPS, and to perform the relevant supervisory and enforcement functions to ensure adequate consumer protection and the safety and soundness of the facilities and systems in Hong Kong. Following public consultation in 2013 on the proposed regulatory regime, a consultation conclusion report was issued in October 2014. The report indicated general support for the regulatory proposals. Where appropriate, comments received from the consultation have been incorporated into the Bill to amend the CSSO, which was introduced into the Legislative Council in February 2015. In tandem with preparing the legislative amendments, the HKMA has begun formulating various supervisory guidelines and systems for the implementation of the new regulatory regime.

<sup>7</sup> NFC is a short-range wireless connectivity technology that provides intuitive, simple, and safe communication between electronic devices. Communication occurs when two NFC-compatible devices are brought within four centimetres of one another.



# International Financial Centre

## PLANS FOR 2015 AND BEYOND

The HKMA will continue to work closely with other central banks, government agencies and the private sector, both locally and internationally, to implement initiatives that enhance Hong Kong's status as an international financial centre.

### International and regional co-operation

Global economic growth is expected to remain uneven in 2015, leading to divergent monetary policies among major economies. The expectation of monetary normalisation in the US and the strengthening of the US dollar is likely to lead to funds outflow from emerging economies. Low oil prices, if persist for a sustained period, may also cause some net oil exporting countries and companies to experience financial difficulties and trigger broader risk aversion against emerging economies. There also appears to have been a growing disconnect between the performance of the financial markets and the real economy. While Asia generally enjoys stronger fundamentals and better macro-economic management, domestic and external imbalances have built up following years of strong credit growth and sharp asset price appreciation. The risk of an abrupt market adjustment and a reversal of capital flows cannot be ruled out, in particular if the Federal Reserve raises interest rates faster and sharper than expected. Therefore, it is important for economies to continue to enhance cross-border co-operation in market surveillance and global financial regulatory reforms to strengthen the resilience of the financial system. By participating in the various international financial and central banking forums, the HKMA is contributing to this global effort.

### Hong Kong's sovereign credit ratings

The HKMA will continue its efforts to maintain Standard & Poor's AAA rating for Hong Kong, and pursue further upgrades of ratings by Moody's, Fitch and other major international credit rating agencies.

### Development of Hong Kong as the premier offshore renminbi business centre

The expanding use of renminbi globally and the progressive financial liberalisation undertaken by the Mainland are expected to provide further momentum for the development of Hong Kong's offshore renminbi business. The HKMA will continue its efforts to expand Hong Kong's renminbi business links with overseas markets to capture opportunities arising from the growing scale of global renminbi activities. It will also work closely with the industry on ways to enhance the competitiveness of Hong Kong's renminbi business platform including market infrastructure. In addition, the HKMA will engage Mainland authorities to further expand the policy headroom for cross-border renminbi fund flows and closer financial co-operation between Hong Kong and the Mainland.

### Market development

The HKMA will continue to participate in developing the local debt market, and, through the GBP, to broaden its investor base and enhance its liquidity. It will work closely with the private sector and industry associations to expand the range and sophistication of market products and services.

The HKMA plans to capitalise on the success of the Government's first sukuk issuance by further promoting the development of Islamic finance in Hong Kong, encouraging product development, raising market awareness and knowledge of Islamic finance, and forging closer ties with key Islamic financial centres and international Islamic organisations. It will also continue to work with other agencies to explore ways to further enhance the competitiveness of Hong Kong's financial sector, particularly in the promotion of Hong Kong as an international asset management hub and regional destination for CTCs. The HKMA will reach out to the asset managers and corporate treasurers in major financial centres, promoting Hong Kong as an offshore renminbi centre, an international asset management hub, and a regional destination for CTCs.

### **OTC derivatives market regulation**

Following passage of the Securities and Futures (Amendment) Ordinance 2014 in March, the HKMA will continue to work with the FSTB and the SFC towards developing the regulatory regime for the OTC derivatives market. Subject to the legislative process, it is expected that the regime will commence in 2015. The first stage of implementation will cover the mandatory reporting and related record keeping obligations. The HKMA and the SFC also plan to conduct public consultation on draft detailed rules for other aspects of the regime in 2015, including the mandatory clearing obligation.

The HKMA will continue its participation in various international forums, including the OTC Derivatives Working Group of the FSB and the OTC Derivatives Regulators' Forum to keep abreast of, and contribute to, regulatory developments in the international arena.

### **Financial infrastructure**

#### ***Development of Hong Kong as payment hub and offshore renminbi business centre***

The HKMA is actively involved in strengthening the relevant renminbi financial infrastructure to grasp the expanding business opportunities and it will continue to co-operate closely with Mainland authorities to achieve this.

#### ***Strengthening the cyber resilience of Hong Kong's RTGS systems***

The HKMA will co-ordinate with the relevant parties the adoption of SWIFT's Market Infrastructure Resiliency Service (MIRS) by 2016. MIRS is a second back up site solution offering technical, operational and geographical diversity to guard against cyber attacks simultaneously affecting the production site and primary back-up site of the RTGS systems.

#### ***Cross-border mutual recognition programme of investment funds***

The HKMA is working towards establishing a robust cross-border infrastructure to support the implementation of the cross-border mutual recognition programme of investment funds. It will continue to work closely with the authorities and industry stakeholders in Hong Kong and on the Mainland to develop a cost effective system solution to accomplish this important initiative.

#### ***Trade repository for OTC derivatives***

The next phase of the trade repository system, to cover derivatives products in the remaining asset classes, is targeted for launch in the first half of 2016. Other new features will also be added in response to local and international regulatory requirements, for example, to support the reporting of mark-to-market valuations, and the sharing and aggregation of data.

#### ***Retail payment initiatives***

The HKMA will continue its efforts to improve Hong Kong's retail payment infrastructure. Given the anticipated participation of government billing departments in the EBPP service in 2015, the HKMA plans to conduct a new round of publicity campaigns to increase public awareness of the service coverage. It will also monitor the development of the e-cheque clearing platform and centralised presentment portal which are expected to be launched in December 2015. In collaboration with the HKAB, steps will be taken to implement consumer education programmes nearer the launch date to increase public awareness of the e-cheque service.

#### ***New regulatory regime for SVF and RPS in Hong Kong***

With the Clearing and Settlement Systems (Amendment) Bill 2015 introduced into the Legislative Council in February this year, the HKMA will work closely with the relevant government departments during the legislative process and continue to engage existing and potential SVF issuers and RPS operators in Hong Kong to help ensure their preparedness for the new regulatory regime.