The global recovery was modest and uneven in 2013, with the advanced economies showing increasing signs of improvement, while emerging market economies generally experienced a slowdown in growth. New policy challenges arose as financial markets responded to the changing pattern of global growth, and capital flows became more volatile amid expectations of a turning point in US monetary policy. Against this background, the HKMA actively participated in international and regional forums to help enhance co-ordination on macroeconomic management and the implementation of global financial regulatory reforms. The increasing use of renminbi in cross-border trade and investment activities further entrenched Hong Kong's role as the global hub for renminbi business. Hong Kong's strong credit standing and robust fiscal performance were recognised by credit rating agency Standard & Poor's, which maintained its top-rated AAA rating for Hong Kong.

## **OVERVIEW**

A divergent trend in growth emerged between the advanced economies and emerging market economies during the year. While the US and Japan saw a pick up in economic activities, many emerging market economies experienced a slowdown in growth. Global financial markets turned more volatile from the second guarter of 2013 as market expectations for the US Federal Reserve's tapering of asset purchases sparked widespread re-pricing of financial assets. For some emerging markets, there were increasing concerns about capital outflows at a time when domestic vulnerabilities and external sector imbalances started to manifest themselves following several years of strong credit growth and sharp asset price rises. In the face of heightened uncertainty, closer international and regional co-operation is needed to promote greater financial stability and to achieve a sustained global economic recovery. International co-ordination is also necessary to ensure consistency and compatibility in the implementation of the various global and national financial regulatory reforms that are being finalised.

The HKMA actively contributes to international discussions on issues of significance to global and regional financial stability. In 2013, it chaired the Monetary and Financial Stability Committee established under the Executives' Meeting of East Asia-Pacific Central Banks (EMEAP). 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)², which plays the leading role in the reform of the international financial system. In addition, the HKMA continued to work closely with ASEAN+3³ authorities on the implementation of enhancements to the Chiang Mai Initiative Multilateralisation (CMIM).

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. The development of Hong Kong as the premier offshore renminbi business centre gained further momentum in 2013 with progressive growth in a full range of offshore renminbi activities, including a 46% increase in both renminbi deposits and trade settlement transactions. The scale of clearing and settlement activities and offshore renminbi foreign exchange transactions all reached new heights. Hong Kong's role as a global renminbi hub was also strengthened by efforts to expand renminbi business links and financial flows with the Mainland and overseas markets.

The safe and efficient operation of Hong Kong's financial infrastructure and its continued development play a significant role in reinforcing the competitive edge of Hong Kong as a premier offshore renminbi business centre and an international financial centre. During the year, different components of the financial infrastructure operated smoothly. From January, the operating window of the cross-border renminbi payment service between Hong Kong and the Mainland was extended by six hours to the new cut-off time of 10:30 p.m. This facilitates timely crossborder payments via Hong Kong's renminbi Real Time Gross Settlement (RTGS) system for banks located in time zones behind Hong Kong and the Mainland. The reporting function of the local trade repository for over-the-counter (OTC) derivatives was introduced in time to support the commencement of the interim reporting requirements in August, which brought Hong Kong into line with major overseas markets in terms of the pace of OTC derivatives market reforms.

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>&</sup>lt;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.

# **REVIEW OF 2013**

## International and regional co-operation

As global financial markets become more interconnected, the HKMA proactively participated in international and regional forums to exchange views and pursue cooperation on issues of common interest. It participated in discussions under the auspices of the FSB, the Bank for International Settlements (BIS) and the Asia-Pacific Economic Co-operation (APEC) to promote sustainable economic growth and financial system stability. The HKMA also continued to advocate the implementation of global financial regulatory reforms, in particular the recommendations of the Group of Twenty (G20), to help strengthen the resilience of the global financial system.

The HKMA co-organised a Global Risk Forum with the Global Association of Risk Professionals in May to discuss the post-crisis expectation and roles of regulators and financial institutions in identifying, managing, and monitoring institution-level and systemic risks. The meeting was attended by 68 senior officials from regulatory bodies and financial institutions around the world. As a member of the Basel Committee on Banking Supervision (BCBS), the HKMA also hosted the 150th meeting of BCBS in Hong Kong in December. The meeting was attended by senior banking supervisors from 27 jurisdictions to discuss key supervisory issues.



Together with banking supervisors from other jurisdictions, Mr Arthur Yuen (third from left on the front row), Deputy Chief Executive of the HKMA, participates in the 150th meeting of Basel Committee on Banking Supervision.

Representing the Government of the Hong Kong Special Administrative Region, the HKMA participated in the donors' negotiations on the tenth replenishment of the Asian Development Fund, which is a concessional financing facility of the Asian Development Bank for the region's poorest economies. The funding for Hong Kong's contribution to the replenishment was approved by the Finance Committee of the Legislative Council (LegCo) in February 2013.

As part of its efforts to promote co-operation with other central banks in the region, the HKMA held a bilateral meeting with Bank Negara Malaysia in August, with both sides agreeing to strengthen co-operation in promoting financial market development, including offshore renminbi business and the internationalisation of Islamic finance.

# Promoting monetary and financial stability in Asia

The HKMA maintained its commitment to regional cooperative 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. The HKMA continued to prepare the Committee's half-yearly Macro-Monitoring Report to assess the region's risks and vulnerabilities and policy implications. A private-sector roundtable was organised during the year for the Committee to exchange views with senior representatives of key financial institutions and relevant multilateral organisations on long-term investment financing in the region against the backdrop of European bank deleveraging. The HKMA led the Committee's discussions on the impact of the global financial regulatory reforms on Asian markets, and facilitated the formulation of a collective regional view on issues of concern to contribute to the international discussions. It also continued its active participation in the ASEAN+3 CMIM-related discussions.

As one of the deputy chairs of the EMEAP Working Group on Payment and Settlement Systems, the HKMA has been working closely with the People's Bank of China (PBoC) and Bangko Sentral ng Pilipinas (the chair and another deputy chair respectively) to co-ordinate the Group's effort in sharing experiences and exchanging information on

developments in domestic and cross-border payment and settlement systems. The HKMA is also taking the lead role in the sub-group on cross-border co-operation and development.

## Hong Kong's sovereign credit ratings

The HKMA continued its 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 rating agencies in 2013. In particular, Standard & Poor's affirmed its highest rating of AAA 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 affirmed 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

During the year, the HKMA continued to work with the industry to enhance Hong Kong's renminbi financial platform and expand business flows with corporates and financial institutions overseas. It also maintained close collaboration with Mainland authorities on facilitating renminbi fund flows between the onshore and offshore renminbi markets.

At the end of 2013, outstanding renminbi customer deposits and certificates of deposit totalled RMB1,053 billion, an increase of 46% from a year earlier. Renminbi trade settlement transactions handled by banks in Hong Kong also expanded by 46% to RMB3,841 billion. Renminbi financing activities remained buoyant with the issuance of renminbi bonds in Hong Kong amounting to RMB117 billion and the outstanding amount of renminbi bonds growing by 31% to RMB310 billion. Outstanding renminbi bank loans totalled RMB116 billion at the end of 2013, up 46% from 2012. The scope of renminbi investment products also increased further, while the turnover of the offshore renminbi foreign exchange market (including spot and forward transactions) in Hong Kong doubled to some US\$15-20 billion equivalent on an average day.

As the global hub for rapidly growing renminbi business and financial activities, the average daily turnover of Hong Kong's renminbi RTGS system exceeded RMB500 billion in December, with around 90% of the transactions conducted in the offshore market. At the end of 2013, 216 banks were participating in Hong Kong's renminbi clearing platform, of which 191 were subsidiaries and branches of overseas banks or the overseas presence of Mainland banks. Banks in Hong Kong handled some 70–80% of the renminbi payments conducted with the Mainland and among the offshore markets globally, according to statistics of the Society for Worldwide Interbank Financial Telecommunication (SWIFT). The amounts due to, and due from, between Hong Kong banks and their overseas counterparts exceeded RMB160 billion in each direction.

To enhance Hong Kong's financial infrastructure and support the development of renminbi lending and financial products, the CNH Hong Kong Interbank Offered Rate fixing (CNH HIBOR fixing) was launched in June by the Treasury Markets Association (TMA). The HKMA also enhanced its renminbi liquidity facility for authorized institutions (Als) in July, providing overnight renminbi funds on T+0 basis and one-day funds on T+1 basis. These are in addition to the one-week funds that were available when the facility was introduced in 2012.

Collaboration on renminbi business between Hong Kong and other economies was broadened in 2013. Facilitated by the HKMA, the first meetings of the private sector dialogues with Australia and Malaysia were held in April and December respectively, while further progress was made at the third meeting of the Hong Kong-London RMB Forum in September. Through these meetings, banks in Hong Kong are able to explore collaboration with their overseas counterparts on a number of aspects, including raising awareness on the use of renminbi, creating more renminbi interbank flows, and developing renminbi products and services to capture opportunities arising from the opening of more channels for cross-border flows with Mainland China. The HKMA also continued to promote the use of Hong Kong's renminbi platform through conducting roadshows in the Middle East and US and engaging overseas corporates and financial institutions through seminars and small-group meetings.



Deputy Chief Executive of the HKMA, Mr Eddie Yue, delivers the welcome remarks at the Third Meeting of the Hong Kong-London RMB Forum held in Hong Kong.

Further progress was made with Mainland authorities on widening the channels for two-way renminbi flows between the onshore and offshore markets. This included expanding the Renminbi Qualified Foreign Institutional Investor (RQFII) scheme by relaxing the investment restrictions and enabling a broader range of institutions in Hong Kong to participate. The Qualified Domestic Institutional Investor (QDII) scheme was also relaxed to allow cross-border investments in renminbi. In addition, the PBoC streamlined requirements for cross-border renminbi transactions, including providing more flexibility for corporates to move renminbi funds from onshore to their offshore entities through intragroup lending.

#### **CEPA**

The Tenth Supplement to the Closer Economic Partnership Arrangement (CEPA) was signed in August. Among other measures, the latest Supplement allows Hong Kong financial institutions, including banks, to establish (i) one joint-venture full licence securities company in each of Shanghai city, Guangdong province and Shenzhen city, with shareholding up to 51% and in each of the pilot areas for financial reforms, with shareholding up to 49%; and (ii) joint-venture fund management companies on the Mainland, with shareholding exceeding 50%.

#### **Training**

Training programmes were conducted during the year for 296 officials (1,267 man-days) from the PBoC, the State Administration of Foreign Exchange and the China Banking Regulatory Commission. These courses covered topics such as bank risk management and compliance

with regulatory requirements, global and regional financial developments and regulatory reforms, monitoring international capital flows and reserves management, financial market development and supervision, and deposit insurance schemes. The HKMA also assisted as coaches in training programmes organised by Mainland authorities and facilitated exchange programmes and seminars for financial industry practitioners from the Mainland.

## **Government Bond Programme**

In the 2013-14 Budget Speech, the Financial Secretary announced plans to double the size of the Government Bond Programme to \$200 billion. On 22 May 2013, the LegCo approved the necessary resolution.

The HKMA continued to co-ordinate the implementation of the programme comprising both institutional and retail bond issuances. For the institutional part, eight bond tenders totalling \$20 billion, with tenors ranging from two to 10 years, were completed in 2013. The amount of institutional bonds outstanding at the end of the year was \$60 billion.

To improve the liquidity of these bonds, the HKMA devised two liquidity enhancement measures for the institutional bond market – the switch tender and the bond swap facility – to be implemented in early 2014. These measures will enhance the effectiveness of market-making activities and liquidity management for Primary Dealers, and facilitate end-investors to trade more efficiently in the market. The HKMA will continue to maintain close contact with market participants to further refine the institutional programme as required.

For the retail programme, a further issuance of \$10 billion inflation-linked retail bond (the third iBond) was announced in the Government's 2013-14 Budget. The issuance was arranged by the HKMA with assistance from relevant service providers. The third iBond was offered to Hong Kong residents in June and attracted over 520,000 applications, with application monies approaching \$40 billion. The number of valid applications set another record for the local retail bond market. The \$10 billion iBond was issued on 24 June. The amount of retail bonds outstanding at the end of the year was \$30 billion.

# **Development of Islamic finance**

The development of the Islamic bond ("sukuk") market in Hong Kong forged ahead in July with the enactment by the LegCo of the Inland Revenue and Stamp Duty Legislation (Alternative Bond Schemes) (Amendment) Ordinance 2013 ("ABS Ordinance"). Amending Hong Kong's tax laws was necessary to provide a comparable tax framework for common types of sukuk, vis-à-vis conventional bonds. Building on the momentum of the passage of the ABS Ordinance, the HKMA has been working with the Government to prepare for the issuance of Government sukuk under the Government Bond Programme, subject to the passage of a bill to amend the Loans Ordinance. This is expected to provide further impetus for other potential sukuk issuers from the public or private sectors to consider issuing sukuk in Hong Kong.

The HKMA also took another important step in promoting the development of Islamic finance in Hong Kong by collaborating with Bank Negara Malaysia to set up a private sector-led Joint Forum on Islamic Finance to strengthen collaboration between market participants in Hong Kong and Malaysia. The first meeting of the Forum was successfully held in Hong Kong in December with the participation of senior representatives of eight commercial banks and three fund management companies. The participants exchanged views on the current trends of Islamic finance and discussed measures to advance the development of Islamic finance in Hong Kong.

In addition, the HKMA organised a series of Islamic finance seminars and workshops in collaboration with key Islamic financial centres, international Islamic organisations and local industry associations to promote market knowledge and awareness of Islamic finance. These were well-received by local industry players.

## Promotion of asset management business

In promoting Hong Kong's asset management industry and to reinforce its position as a leading asset management centre, the HKMA further explored ways to improve the international competitiveness of Hong Kong's financial markets and provide a more flexible business environment as well as a more favourable tax and regulatory environment for these businesses. Contacts were maintained 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.

The HKMA visited asset owners, asset managers and service providers in major financial centres through small groups and one-on-one meetings to highlight the latest developments in Hong Kong and listen to their business plans for Asia. In seeking their views on potential hurdles for their operations in Hong Kong, the HKMA can help improve Hong Kong's financial platform. These outreach meetings were held with private banking institutions, pension funds, mutual funds, private equity firms, hedge funds and fund administrators in Abu Dhabi, Basel, Beijing, Dubai, Geneva, Korea, London, Luxembourg, New York, Queensland, Shanghai, Shenzhen, Singapore, Sydney and Toronto.

# **OTC derivatives market regulation**

The HKMA has been working closely with the Financial Services and the Treasury Bureau (FSTB) and the Securities and Futures Commission (SFC) to develop a regulatory regime for the OTC derivatives market in Hong Kong, aimed at reducing systemic risk and enhancing transparency in the OTC derivatives market.

The Securities and Futures (Amendment) Bill 2013, which provides for the regulatory framework for the OTC derivatives market, was gazetted in June and introduced into the LegCo in July. The HKMA and the SFC are working on drafting the detailed rules for implementing the new framework.

As an interim measure before the new legislation comes into effect, the HKMA issued details of the interim reporting requirements in June, which, under the Banking Ordinance, require the reporting of specified OTC derivative transactions between licensed banks to the trade repository developed by the HKMA. The interim reporting requirements took effect from 5 August 2013.

The HKMA continued to engage the industry through a number of channels, including the OTC Derivatives Market Working Group under the TMA and its sub-groups, to address specific regulatory and infrastructural issues. The HKMA also participated in international forums, including the OTC Derivatives Working Group under the FSB, the OTC Derivatives Regulators' Forum, the BCBS and the International Organization of Securities Commissions (IOSCO) joint Working Group on Margining Requirements, contributing to the relevant international initiatives and monitoring closely the international regulatory developments.

A close dialogue is 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.

## **Treasury Markets Association**

The HKMA continued to work in collaboration with the TMA to develop Hong Kong's treasury markets, providing strategic support as necessary. The TMA strives 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 with financial centres around the world.

At the end of 2013, the Association had 1,649 Individual Members and 81 Institutional Members from banks, investment houses, insurance companies, money brokers, financial information services providers, exchanges and large corporations. During the year, apart from launching CNH HIBOR fixing as mentioned in the earlier part of this chapter, the TMA accomplished several other important tasks:

- developed the "Code of Conduct for Reference
  Banks for HKAB's Interest Settlement Rate" and
  assumed the role of administrator in HIBOR fixing
  - the recommendations made by the TMA to the Hong Kong Association of Banks (HKAB) in relation to enhancing the governance and robustness of the fixing mechanism for HIBOR were endorsed by the HKMA for implementation. In particular, the TMA developed the "Code of Conduct for Reference Banks for HKAB's Interest Settlement Rate", which the HKMA endorsed for issuance as an annex to the relevant module under the Supervisory Policy Manual. The TMA also assumed the important role of administrator of the HIBOR fixing process in September 2013.
- co-hosted the 2013 Global Meeting of FX
   Committees with the HKMA the meeting, the first of its kind to be held in Hong Kong, was attended by representatives of foreign exchange committees from major global financial centres. It provided an opportunity for Hong Kong to showcase the strengths of its treasury markets to the world.
- co-organised the Treasury Markets Summit with the HKMA the September Summit focused on various facets of Hong Kong's asset management business, including the synergies between Hong Kong and Qianhai, the latest developments in the Renminbi Qualified Foreign Institutional Investors scheme, the mutual recognition of funds between Hong Kong and the Mainland, and the opportunities and challenges in developing Islamic capital markets in Asia.

# Hong Kong's financial infrastructure

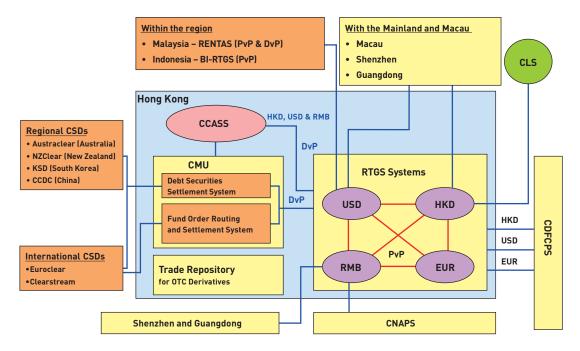
The HKMA plays a major role in developing Hong Kong's financial infrastructure to reinforce its status as a regional hub for payment and settlement of funds and securities. Over the years, continuous effort and resources have been devoted to building a robust and efficient multi-currency, multi-dimensional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

Key achievements include the establishment of RTGS systems for the Hong Kong dollar, the US dollar, the euro and the renminbi, and development of bilateral links between the local RTGS systems and overseas RTGS systems, and between the Central Moneymarkets Unit

(CMU) and regional and international Central Securities Depositories (CSDs), such as Euroclear, Clearstream, and the depositories in Australia, New Zealand, South Korea and the Mainland.

In response to industry demands and international developments, new components have been added to broaden the scope and increase the depth of the financial infrastructure in Hong Kong. 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.

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



BI-RTGS – Bank Indonesia Real Time Gross Settlement (Indonesia's rupiah RTGS system) CCASS – Central Clearing and Settlement System (settlement system for shares)

CCDC – China Central Depository & Clearing Co., Ltd.
CDFCPS – China Domestic Foreign Currency Payment System

CLS – Continuous Linked Settlement

CMU - Central Moneymarkets Unit (settlement system for debt securities)

CNAPS - China National Advanced Payment System

KSD - Korea Securities Depository

RENTAS – Real Time Electronic Transfer of Funds and Securities (Malaysia's ringgit RTGS 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, and continues to run smoothly and efficiently. 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 equally by the HKMA and the HKAB. In 2013, the HKICL processed a daily average of \$507 billion in CHATS transactions (25,034 items), compared with \$504 billion (23,054 items) in 2012.

In addition to settling large-value payments, CHATS also handles daily bulk clearings of stock market 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 repurchase agreements with the HKMA to settle their interbank payments.

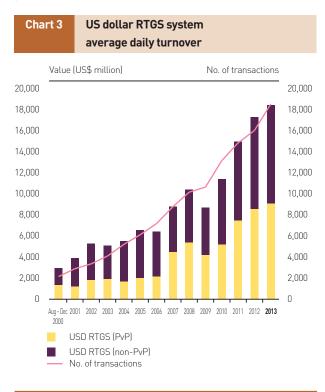
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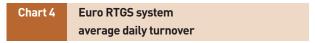
# Foreign currency RTGS systems in Hong Kong

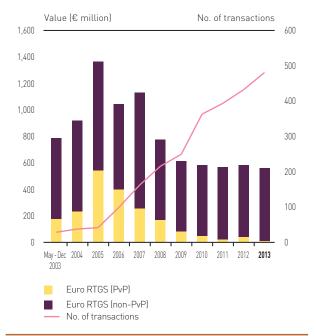
The US dollar, euro and renminbi RTGS systems all operated smoothly. The average daily turnover of the renminbi RTGS system continued its brisk growth momentum in 2013, rising to a daily average of RMB395 billion in the year of 2013, after increasing from RMB121 billion in 2011 to RMB214 billion in 2012, amid the rapid expansion of renminbi business in Hong Kong. As mentioned earlier in this chapter, the momentum accelerated for the year and the daily average exceeded RMB500 billion in December.

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 RMB2.6 billion in the second half of 2012 to RMB4.5 billion in 2013, on the back of the development of renminbi business globally and the continuous momentum in the internationalisation of the renminbi.

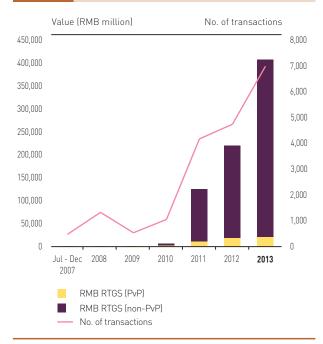
The average daily turnovers and other details of the foreign currency RTGS systems are listed in Charts 3-5 and Table 1.







# Chart 5 Renminbi RTGS system average daily turnover



# Table 1 Foreign currency RTGS systems

		Settlement institution	Number of participants	Average daily	Average daily
RTGS system	Launch date	or Clearing Bank	at the end of 2013	turnover in 2013	transactions in 2013
US dollar	August 2000	The Hongkong and	Direct: 94	US\$18.1 billion	18,220
		Shanghai Banking	Indirect: 129		
		Corporation Limited			
Euro	April 2003	Standard Chartered Bank	Direct: 37	€563.7 million	485
		(Hong Kong) Limited	Indirect: 18		
Renminbi	June 2007	Bank of China	Direct: 184*	RMB395.4 billion	6,788
		(Hong Kong) Limited			

<sup>\*</sup> Refers to those that have completed the registration of direct membership for the renminbi RTGS system among over 200 participating banks that have signed the Clearing Agreement with the Clearing Bank.

# Payment-versus-payment

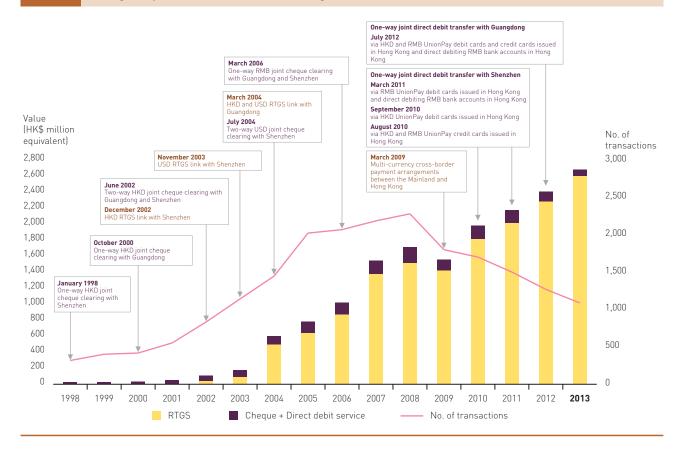
Payment-versus-payment (PvP) is a mechanism for settling a foreign exchange transaction to ensure that payments in the two currencies involved are settled simultaneously. Within Hong Kong, six cross-currency PvP links have been established among the Hong Kong dollar, US dollar, euro and renminbi RTGS systems. Hong Kong's US dollar RTGS system has also established two cross-border PvP links, with Malaysia's ringgit RTGS system in November 2006 and Indonesia's rupiah RTGS system in January 2010. 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 2013, the transaction value of

Hong Kong dollar, US dollar, euro and renminbi-related PvP transactions amounted to about HK\$4,236 billion, US\$2,077 billion, €1 billion and RMB4,356 billion respectively.

## Payment links with the Mainland

The HKMA continues to work closely with Mainland authorities in providing efficient cross-border payment links to meet growing demands. In 2013, the average daily turnover handled by the various system links was equivalent to \$2.7 billion, including the RTGS cross-border links with the Mainland's Domestic Foreign Currency Payment Systems launched in March 2009 (Chart 6).

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



The RTGS system links with Shenzhen and Guangdong handled more than 22,000 transactions during the year, with a total value equivalent to \$566 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.

The two-way joint cheque-clearing facilities processed about 211,000 Hong Kong dollar and US dollar cheques in 2013, with a value equivalent to \$21 billion. The facilities shortened 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 2013, renminbi cheques with a total value equivalent to around \$7 million were cleared.

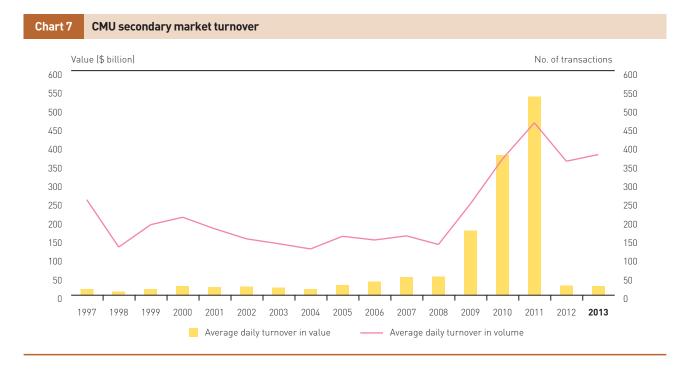
#### Payment links with Macau

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 2008. 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 2013, Hong Kong dollar cheques with a total value of about \$28 billion and US dollar cheques with a total value of about US\$26 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. These linkages also assist Hong Kong investors to hold and settle foreign securities held with CSDs outside Hong Kong. In 2013, the CMU processed an average daily value of \$24 billion (377 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 EFBN was \$751 billion and the total amount of other debt securities was equivalent to \$1,036 billion, of which renminbi debt securities amounted to RMB382 billion.



# Financial infrastructure development

The HKMA completed a number of projects in 2013 to improve the safety and efficiency of Hong Kong's financial infrastructure, and to capture new business opportunities.

# Extension of the operating hours of the crossborder renminbi payment service between Hong Kong and the Mainland

The extension of the operating window of Hong Kong's renminbi RTGS system in June 2012 has allowed renminbi payments in the offshore market to be settled until 11:30 p.m. Hong Kong time. However, a payment destined for the Mainland can only be settled on the next working day if it reaches Hong Kong after 4:30 p.m. because the Mainland's nationwide China National Advanced Payment System (CNAPS) for renminbi settlement closes at 5:00 p.m.

To extend access to the onshore market for renminbi settlement via the Hong Kong platform, the renminbi RTGS system in Hong Kong was linked to the Shenzhen Financial Settlement System on 21 January 2013. As the Shenzhen Financial Settlement System operates around the clock, the linkage enabled the extension of the operating hours of the cross-border renminbi payment service between Hong Kong and the Mainland from 4:30 p.m. to 10:30 p.m., thus facilitating, in particular, overseas renminbi payments to reach the Mainland through Hong Kong's renminbi platform on the same day. This will provide a more efficient and comprehensive service to cater for the development of renminbi business in Hong Kong.

## Settling UnionPay card payments in renminbi

Supported by the HKMA and the PBoC, UnionPay International began providing merchants in Hong Kong with the option of receiving renminbi for goods and services rendered to Mainlanders using UnionPay debit and credit cards from December. Under the new arrangement, merchants in Hong Kong can choose to receive renminbi or Hong Kong dollars or a combination of both, which will help promote the development of crossborder settlement in renminbi, enlarge the renminbi liquidity pool in Hong Kong and consolidate Hong Kong's role as the premier renminbi business centre.

# Pan-Asian CSD Alliance project – cross-border collateral management service

Following the launch of the cross border collateral management service in 2012, the HKMA continued to work with Euroclear Bank to implement a DvP link between Euroclear Bank's global tripartite repo system and the Hong Kong RTGS systems in July. The DvP link enables simultaneous settlement of the cash leg and the collateral leg of a repo transaction, through the domestic RTGS systems and the global tripartite repo system respectively. The funds settled in the domestic RTGS systems are ready for immediate use, significantly improving the settlement efficiency of repo transactions.

#### Extension of CMU's real time settlement window

The HKMA launched a series of enhancements to the CMU in 2013, one of which involves re-opening the real time settlement window on completion of the daily batch settlement run. This extended the length of the CMU's real time settlement window to 6:30 p.m., thereby enabling and encouraging CMU participants to adopt real time settlement for securities transfers more readily for better risk management purposes.

# CMU Central Bank Placement Co-ordinating Window

The HKMA's tendering platform service continued to support the issuance of offshore renminbi sovereign bonds in Hong Kong. Following a smooth placement in 2012, the Ministry of Finance continued to use the HKMA CMU Central Bank Placement Co-ordinating Window for a RMB3 billion offshore renminbi sovereign bonds placement on 26 June. The placement attracted a total subscription of RMB5.48 billion from overseas central banks and monetary authorities. In addition, RMB10 billion in offshore renminbi sovereign bonds was issued to institutional investors through the bond tendering platform. The arrangements were welcomed by subscribers, addressed the increasing demand for renminbi sovereign bonds, and helped expand the investor base for the renminbi bond market, reinforcing the role of Hong Kong as the global hub for offshore renminbi business.

## Money settlement service for investment funds

The CMU Fund Order Routing and Settlement Service was enhanced in June to facilitate the money settlement of investment fund orders. Service users are now able to settle payments related to investment fund orders more efficiently, as well as making use of the service for the routing of investment fund orders.

## Trade repository for OTC derivatives

The development of the local trade repository for OTC derivatives progressed on schedule. In July, the transaction reporting function of the trade repository was launched to support the implementation of the interim reporting requirements introduced by the banking regulators. A series of preparations were made to ensure the mandatory reporting requirements could be introduced smoothly. The technical specifications and procedures for reporting were well communicated to potential users in late 2012. After the regulators indicated in early 2013 the impending introduction of the interim reporting requirements, the trade repository began an extensive series of training and simulation tests for potential users to ensure their readiness to report. Reporting commenced smoothly in August in line with the interim requirements. The HKMA continued to make progress on the further development of the trade repository to ensure it could cope with local regulatory requirements and to meet international standards.

#### 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 system

With the concerted efforts of the HKMA, the HKAB and HKICL, the electronic bill presentment and payment (EBPP) system was successfully launched in December. The system provides a one-stop platform for users to receive, manage and schedule payments for electronic bills through their internet banking accounts. The multicurrency and multi-functional platform supports bill payments in Hong Kong dollars, renminbi and US dollars. It can also handle a range of transactions including,

- business-to-customer (B-2-C) e-billing and e-payment;
- (ii) business-to-business (B-2-B) e-billing and e-payment;
- (iii) cross-border e-billing and e-payment; and
- (iv) online charity donations and presentment of electronic donation receipts.

A total of 23 banks, including all major retail banks in Hong Kong, have agreed to join the EBPP service, with 18 of them launching the service in December. It was also promoted extensively with electronic brochures and banners posted on the websites of the HKMA, the HKAB and participating banks, to raise public awareness and interest in the EBPP service.



Deputy Chief Executive of the HKMA, Mr Peter Pang (second from right), attends the launching ceremony of the Electronic Bill Presentment and Payment (EBPP) service to unveil a convenient one-stop bill payment service for the public.

# Development of e-cheques

The HKMA continued its discussions with the industry to finalise the functional design of an e-cheque. As a new payment instrument that will be signed, issued, delivered and presented through electronic means, e-cheques will retain all the basic features and benefits of a paper cheque, but still provide enhanced security features and obviate the need for physical delivery and presentment. They will also reduce the cost and improve the efficiency of cheque processing. To ensure the legal backing of e-cheques, the banking industry conducted a review and ascertained that the design and operating model of e-cheques can continue to be supported by the legal framework of the Bills of Exchange Ordinance.

# Near Field Communication<sup>4</sup> (NFC) mobile payment

The HKMA conducted a consultancy study to examine the potential of NFC mobile payments and the need to build an interoperable infrastructure to support such development in Hong Kong. One of the study's recommendations, released in March, was to establish a common set of standards and guidelines to facilitate the development of interoperable NFC mobile payment solutions by the

banking industry. As a result, the HKMA and the HKAB established an NFC task force to discuss and finalise the standards and guidelines. In November, the HKAB issued the "Best Practice for NFC Mobile Payment in Hong Kong" to the banking industry following a series of reviews by the task force members and the HKMA. The document sets out the benchmarks for various security requirements, technical standards and operational processes involved in the development of interoperable services.

By the end of 2013, five banks and a non-bank payment service provider had either begun or announced plans to provide NFC mobile payment services to their customers. Four mobile network operators also entered the market to support such payment services.

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

The HKMA continued to work closely with the FSTB and the Department of Justice on proposed legislative amendments to the Clearing and Settlement Systems Ordinance for the implementation of a regulatory regime for stored value facilities and retail payment systems. 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. A three-month public consultation on the regulatory proposals was conducted jointly by the HKMA and the FSTB between 22 May and 22 August. While the comments gathered were generally supportive of the proposals, policy adjustments were made and incorporated in the legislative amendments where appropriate. At the same time, new computer systems and supervisory policy manuals were being developed to pave the way for the implementation of the new licensing and designation regimes.

Near Field Communication (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.

# **PLANS FOR 2014 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

The global economic recovery is expected to remain modest and uneven in 2014. As the pace of further reductions in the US Fed's asset purchases remains uncertain and data-dependent, financial market volatility will likely continue. Cross-border capital flows will be sensitive to developments in the global economy, particularly in the US, as well as the evolution of the US monetary policy. It is possible that regional economies, which have seen domestic vulnerabilities built up in prior periods, could experience corrections if capital flows reverse. It is therefore important for economies to continue to further enhance co-operation in market surveillance to strengthen the resilience of the financial system. The implementation of global financial regulatory reforms will also require cross-border co-ordination. The HKMA will contribute to the global effort through its continued participation in various central banking and international financial forums.

# Hong Kong's sovereign credit ratings

The HKMA will continue its efforts to preserve 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 in trade and investment activities, along with the progressive financial liberalisation taking place on the Mainland, are expected to provide further impetus for the continued development of Hong Kong as the premier offshore renminbi business centre. The HKMA will work closely with the financial industry to enhance Hong Kong's renminbi financial platform to meet new business needs and to expand renminbi business links with overseas markets. It will also maintain close dialogue and co-operation with Mainland authorities to enable more efficient circulation of renminbi funds between the onshore and offshore markets and foster closer financial co-operation between Hong Kong and the Mainland, through CEPA and other initiatives.

# **Market development**

The HKMA will pursue the development of the local debt market, and the implementation of the Government Bond Programme to broaden its investor base and enhance its liquidity. It will maintain close dialogue with the private sector and industry associations to expand the range and sophistication of market products and services.

In promoting Islamic finance in Hong Kong, the HKMA will encourage product development, raise market awareness and knowledge of Islamic finance, and forge 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. This will include reaching out to asset managers in major financial centres to promote Hong Kong as an offshore renminbi centre in addition to being an asset management hub.

# **OTC derivatives market regulation**

The HKMA will continue to work with the FSTB and the SFC towards developing the regulatory regime for the OTC derivatives market in Hong Kong. In 2014, the HKMA and the SFC plan to conduct public consultation on the draft rules under this regime.

After the regulatory framework is introduced, the HKMA will issue supervisory guidance outlining the key requirements and its approach to supervising Als' OTC derivatives activities.

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 a payment hub for renminbi to reinforce its status as the premier offshore renminbi business centre

The HKMA is actively involved in strengthening renminbirelated financial infrastructure in Hong Kong to cope with the expanding offshore renminbi business opportunities. It will continue to co-operate closely with Mainland authorities to further enhance Hong Kong's renminbi financial infrastructure.

## Third cross-border PvP link

During the year, the Bank of Thailand and the HKMA launched a project to establish a cross-border linkage between the US dollar RTGS system in Hong Kong and BAHTNET, the Thai Baht RTGS system in Thailand. The new linkage, scheduled to begin in July 2014, will facilitate cross-border PvP settlement of US dollar and Thai Baht foreign exchange transactions. The linkage will help eliminate principal risk and increase settlement efficiency of the transactions, and will be the third cross-border PvP linkage in the Asian region. Apart from promoting regional monetary and financial stability, it will provide new business opportunities for Hong Kong banks to offer payment and cash management services to Thai banks, thereby reinforcing the status of Hong Kong as a regional payment hub.

# Intraday liquidity monitoring indicators

The BCBS issued in April a paper on *Monitoring Tools* for Intraday Liquidity Management, which requires banks to start reporting indicators on their intraday liquidity positions in payment systems by January 2015. A project is now under way by the HKMA to enhance the RTGS systems to support the implementation of the BCBS intraday liquidity monitoring indicators in Hong Kong by the due date.

# Pan-Asian CSD Alliance project

The HKMA will continue to work with global tripartite repo system operators and international central securities depositories to enable local financial institutions, using their securities as collateral, to more easily obtain foreign currency liquidity from international financial institutions. The HKMA is also continuing with the development of the centralised corporate action platform to facilitate the processing of corporate action events of debt securities. The platform is expected to be launched in phases from 2015.

#### Trade repository for OTC derivatives

The next phase of the trade repository system is targeted for launch in the third quarter of 2014, and will focus on including the remaining most commonly traded products in the local market and products requested to be added by regulators. The development of the trade repository system is expected to be substantially completed by the end of 2015.

# Retail payment initiatives

The HKMA will conduct a series of publicity campaigns to promote public interest and awareness in the new EBPP service. Merchants from different sectors are expected to join the service in stages, and major government billing departments such as the Water Supplies Department and Rating and Valuation Department are targeted to join by the end of 2014. The HKMA will continue to oversee the implementation of the e-cheque clearing platform and centralised presentment portal, with the launch date tentatively set for the second half of 2015. In addition, the HKMA will monitor the market development of the NFC mobile payment services and how the Best Practice is helping the industry to introduce new services and products with a high degree of interoperability.

# New regulatory regime for stored value facilities and retail payment systems in Hong Kong

The HKMA will work with the FSTB and the Department of Justice on drafting the legislation for the proposed new regulatory regime for SVF and RPS taking into account comments from industry participants and members of the public. The amendment bill is expected to be introduced into the LegCo in the 2014/15 legislative year.