The world economic recovery gathered pace in 2010, following concerted efforts by policymakers to restore confidence in the global financial system. Nevertheless, challenges remain in supporting a more balanced global growth and maintaining financial stability. The HKMA has actively participated in international discussions on reforms to the global financial system; and has strengthened regional surveillance and co-operation to promote financial stability. Renminbi business has grown rapidly, enabling Hong Kong's development as an offshore renminbi business centre. Global credit rating agencies have upgraded their Hong Kong ratings, including an AAA from Standard & Poor's, the highest rating assigned by the agency.

OVERVIEW

Global economic and financial market conditions improved further in 2010. However, uncertainties remain with a still fragile recovery and deepening debt crisis in advanced economies. Emerging markets continued to recover strongly. The unprecedented loose monetary conditions in the advanced economies and better growth prospects in developing economies have attracted capital flows into the region, giving rise to asset price inflation and upward pressure on consumer prices. All these challenges call for action and co-operation to build more resilient financial systems and markets worldwide.

The HKMA actively participates in international discussions and exchanges views with the international community on issues of significance to the global and regional financial stability. In 2010, it hosted the Executives' Meeting of East Asia-Pacific Central Banks (EMEAP)¹ Deputies' Meeting and Monetary and Financial Stability Committee (MFSC) Meeting, and continued to co-ordinate the macrosurveillance work for the EMEAP MFSC. The HKMA also took part in meetings and forums of multilateral organisations, notably the Financial Stability Board (FSB)2, which plays a key role in the reform of the international financial system. In addition, Hong Kong, through the HKMA, joined the Chiang Mai Initiative Multilateralisation (CMIM) – a new regional joint-defence mechanism against financial instability established under the aegis of ASEAN + 3.3 CMIM is a mutual assistance framework which provides short-term US dollar support to participants facing liquidity shortages.

- 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 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 implement 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.
- 3 ASEAN + 3 comprises the 10 ASEAN member countries (Brunei, Cambodia, Indonesia, Lao PDR, Malaysia, Myanmar, the Philippines, Singapore, Thailand and Vietnam), together with China, Japan and Korea.

To enhance the status of Hong Kong as an international financial centre and to contribute to the Mainland's financial reform and liberalisation, the HKMA further strengthened cross-border financial co-operation with Mainland authorities. Various policy initiatives were also taken to further develop renminbi business in Hong Kong, including the expansion of the renminbi trade settlement scheme and renminbi bond issuance. Clarification of the supervisory principles and the refinement to the clearing arrangements have made it easier for individuals and companies to conduct renminbi activities. These initiatives have provided the right environment for the development of a renminbi interbank market in Hong Kong. Financial institutions have also seized the opportunity to introduce a variety of renminbi-denominated investment products in Hong Kong to meet the growing market demand, while expanding their business on the Mainland. The HKMA continued to maintain close contact with the Mainland authorities to enhance Hong Kong's role in promoting the wider use of the renminbi outside the Mainland.

Other initiatives to strengthen Hong Kong's international financial status include enhancing the robustness, efficiency and competitiveness of its financial infrastructure. During the year, the migration of the Real Time Gross Settlement (RTGS) systems and Central Moneymarkets Unit (CMU) (the debt securities clearing and settlement system operated by the HKMA) from a proprietary platform to the global SWIFTNet open platform was completed, which has removed the operational barrier for overseas financial institutions to join the RTGS systems. Enhancements were made to the renminbi RTGS system to cope with new business opportunities; and the HKMA embarked on a project to develop a local trade repository (TR) for over-the-counter (OTC) derivatives trades to help improve market transparency and bring Hong Kong's financial regulatory regime into line with evolving global standards.

REVIEW OF 2010

International and regional co-operation

With increasing globalisation, and closer economic and financial integration in Asia, the HKMA organises and participates in international and regional initiatives and discussions on a wide range of issues. It attended meetings of the Asia-Pacific Economic Co-operation (APEC), the FSB and the Bank for International Settlements (BIS). In 2010, much of the work of the international financial community continued to focus on promoting strong, sustainable and balanced global growth, and strengthening and reforming the international financial system. The initiatives, led principally by the Group of Twenty (G-20), have achieved significant progress.⁴ Hong Kong is involved in implementing the G-20's initiatives and recommendations through different channels, including the HKMA's participation in the FSB Plenary, and Standing Committees on Assessment of Vulnerabilities and on Supervisory and Regulatory Co-operation. Since 2009, the HKMA has been a member of the Basel Committee on Banking Supervision, the leading international forum for co-operation on banking supervisory matters, and contributed to initiatives such as enhancing Basel II and formulating the Basel III rules endorsed by the G-20 leaders in November 2010.

As a member of the BIS, the HKMA hosted the Committee on the Global Financial System (CGFS)⁵ roundtable on bank debt markets in August 2010, discussing banks' funding challenges, investors' behaviour towards bank debts and the impact of regulatory reforms on bank funding. In contributing to the reform of the international financial system, the HKMA is pursuing the implementation in Hong Kong of the relevant recommendations and best practices that are appropriate to local circumstances. Additional information on the HKMA's role in international co-operation can be found in the Chapter on Banking Stability.

Promoting monetary and financial stability in Asia

The 39th EMEAP Deputies' Meeting and the 8th EMEAP MFSC Meeting were hosted by the HKMA in November. As co-ordinator of MFSC's macro-surveillance, the HKMA conducted analyses and prepared the Committee's bi-annual Macro-Monitoring Report to assess the region's risks and vulnerabilities, in particular those associated with the global growth outlook, sovereign debt crisis in advanced economies and strong capital flows into the region. As the chair of the EMEAP Working Group on Banking Supervision, the HKMA led the studies on the reform package of the Basel Committee and provided comments to the Basel Committee to allow the region's collective point of view to be taken into account in the development of the international standards. A tripartite working group established by the HKMA, Bank Negara Malaysia and the Monetary Authority of Singapore mapped out a co-ordinated strategy for the smooth exit from the full deposit guarantees in their respective jurisdictions at the end of 2010.

On 24 March, the Finance Ministers and Central Bank Governors of the ASEAN + 3 countries and the Monetary Authority announced the implementation of the CMIM Agreement – an advanced framework for regional emergency liquidity support. With access of up to US\$120 billion, the CMIM can supplement existing international financial arrangements and help guard against financial contagion in the region. Hong Kong's participation in this initiative is a demonstration of its autonomy in international financial affairs under the "One Country, Two Systems" principle, and has substantial practical and symbolic importance to Hong Kong's financial stability.

⁴ Hong Kong participates in the G-20 as a member of the China delegation.

The CGFS is a central bank forum under the BIS for monitoring and examining broad issues relating to financial markets and the global financial system.

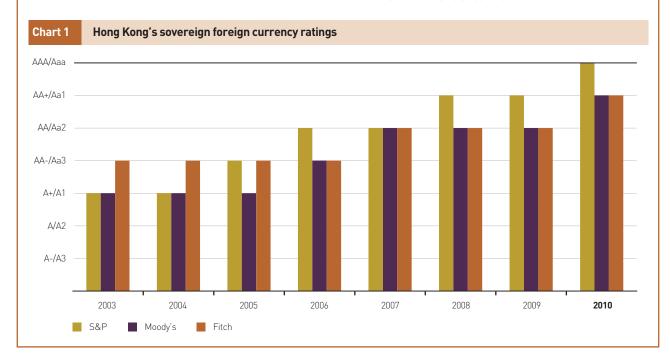
As one of the deputy chairs of the EMEAP Working Group on Payment and Settlement Systems, the HKMA has been working closely with the People's Bank of China (PBoC) and Bank Indonesia (the chair and another deputy chair respectively) to co-ordinate the Group's effort in sharing experiences and exchanging information on developments in domestic and cross-border payment and settlement systems. A new sub-group on cross-border co-operation and development was formed, with the HKMA taking the lead role.

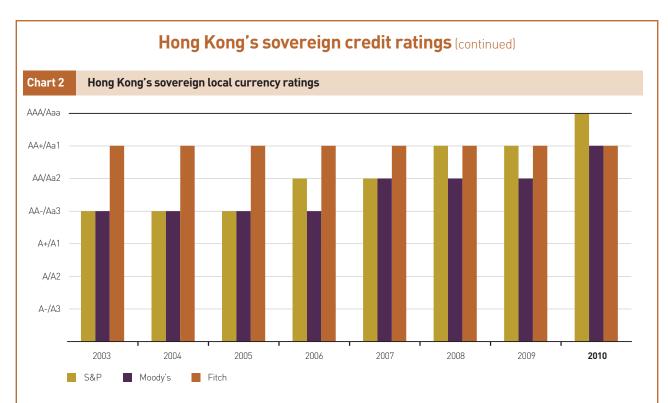
The HKMA participated in the Basel Committee on Banking Supervision – Committee on Payment and Settlement Systems Working Group on Intraday Liquidity Management to develop indicators for supervisors to monitor banks' management of their intraday liquidity risks, and assist in the review of the implementation of principles relating to banks' payment and settlement activities. The HKMA hosted a meeting of the Working Group in December, and was also involved in other international forums including the Asian Bond Market Initiatives.

Hong Kong's sovereign credit ratings

Since July 2003, the HKMA has played a pivotal role in the adoption of a more proactive approach towards major international credit rating agencies – Standard & Poor's (S&P), Moody's Investors Service (Moody's) and Fitch Ratings (Fitch) – on Hong Kong's sovereign credit ratings. The HKMA works closely with the Government to present a balanced assessment of Hong Kong's

economic and financial developments to the agencies, which has assisted them in better understanding the strengths of the economy. This has led to a series of upgrades to Hong Kong's sovereign ratings over the past several years (Charts 1 and 2). A higher sovereign credit rating helps lower funding costs for Hong Kong debt issuers and strengthens Hong Kong's status as an international financial centre.





In 2010, discussions with credit rating agencies focused on the strong and speedy recovery of the Hong Kong economy from the global financial crisis. Comparative analyses showed that Hong Kong continued to possess triple-A (that is, AAA/Aaa) credit qualities and outperform the triple-A median economy in key rating variables, notably in fiscal and external positions. Hong Kong's outperformance of some triple-A economies had further widened as a number of advanced economies were battered by the global financial crisis and escalating sovereign debt challenges. Quantitative analyses also showed that Hong Kong would continue to benefit from robust economic growth on the Mainland and that potential risks originating from the Mainland were low and manageable.

These efforts contributed to further upgrades in Hong Kong's sovereign credit ratings by all major international credit rating agencies in 2010. S&P upgraded Hong Kong's ratings to AAA, the agency's highest rating category and the highest sovereign rating ever assigned to Hong Kong. It reflected the agency's recognition of Hong Kong's large net external creditor position, solid fiscal strength and above-average growth potential for a high-income economy. Moody's and Fitch both upgraded Hong Kong's ratings to Aa1 and AA+ respectively, just one notch below triple-A. Moody's also assigned a "Positive" outlook to Hong Kong's ratings, an indication that an upgrade to Aaa was likely.

Financial co-operation with the Mainland

2010 was an eventful year for the development of renminbi business in Hong Kong. Significant growth and progress was seen in various areas, including cross-border trade settlement, deposits, bond issuance and the introduction of financial and wealth management products.

The renminbi trade settlement scheme, introduced in July 2009, was expanded further in June and December 2010, with companies in 20 provinces and cities on the

Mainland having the option of settling their current account transactions with any other economy in renminbi. As a result, the amount of trade transactions settled through banks in Hong Kong increased substantially from a monthly average of RMB4.5 billion in the first half of the year to over RMB57.0 billion a month in the second half of the year. Supported by the increasing volume of trade transactions, renminbi deposits in Hong Kong grew from just over RMB62 billion at the end of 2009 to about RMB315 billion at the end of 2010.

Following the expansion of the renminbi trade settlement scheme, the HKMA and the PBoC signed a memorandum in July to strengthen co-operation and facilitate the wider use of renminbi outside the Mainland. At the same time, the PBoC and Bank of China (Hong Kong) Limited, the Renminbi Clearing Bank, also signed a revised Settlement Agreement on the Clearing of Renminbi Businesses. The revision of the agreement effectively permits all companies, including securities firms, asset management companies and insurance companies to open renminbi bank accounts and removes the restrictions on renminbi interbank transfers between personal accounts and corporate accounts. Market players were quick to respond to these developments, with the launch of a wide range of renminbi financial and wealth management products, such as renminbi-denominated insurance policies and investment funds.

The growing pool of renminbi liquidity has enabled the development of Hong Kong as an offshore renminbi financing platform. In 2010, 16 renminbi bonds were issued in Hong Kong involving some RMB36 billion. The issuers ranged from private companies to multinational financial institutions, indicating their appetite for using Hong Kong's comprehensive and multi-currency financial platform to raise renminbi funds. In addition, the Finance Department of the Ministry of Finance successfully issued RMB5 billion of renminbi sovereign bonds to institutional investors by using the CMU's tendering platform, after signing a Co-operation Memorandum with the HKMA. This manifests a deepening of financial co-operation between the Mainland and Hong Kong, and is expected to open the door wider for the issuance of renminbi sovereign bonds.

On 17 August, the PBoC promulgated a notice on a pilot scheme for the Renminbi Clearing Bank and Participating Banks outside the Mainland to invest in the Mainland's interbank bond market. The scheme has opened up a channel for the holders of renminbi funds and financial

institutions in Hong Kong to invest in the Mainland market, which will further promote the development of renminbi trade settlement and enhance the attractiveness of renminbi offshore business in Hong Kong. More importantly, it provides a pathway for the circulation and capital preservation of renminbi funds in Hong Kong. By the end of 2010, four Hong Kong banks had received approval, and applications from a number of other banks were being processed by Mainland authorities.

At the beginning of 2011, the PBoC announced a pilot scheme to allow Mainland enterprises to use renminbi in conducting overseas direct investment (ODI). Banks in Hong Kong may obtain ODI-related renminbi funds from their counterparts on the Mainland to facilitate and finance ODI transactions through the Hong Kong platform. This will further improve the circulation of renminbi funds for trade and investment activities between Hong Kong and the Mainland.

Overall, the development of renminbi business in Hong Kong has been encouraging. During the year, the HKMA issued guidance to authorized institutions (AIs) setting out the principles and operational arrangements for renminbi business, the scope of this business in relation to corporate customers and the associated supervisory measures, for the cross-border trade settlement pilot scheme. To further promote the potential of this offshore business, the HKMA is preparing overseas road shows focusing on locations which have strong and growing trade and investment flows with the Mainland.

A further liberalisation of the Closer Economic Partnership Arrangement (CEPA) has been added under the Seventh Supplement relaxing the requirements for Hong Kong banks serving Hong Kong enterprises operating on the Mainland. It allows the banks to extend renminbi banking services to their corporate clients with a business presence on the Mainland.

Milestones in renminbi business development in Hong Kong

January 2004

Personal renminbi business commences, including deposit-taking, exchange and remittance services.

July 2007

The launch of the first issue of renminbi bonds in Hong Kong.

July 2009

The pilot scheme for cross-border trade settlement in renminbi commences operation.

September 2009

The first renminbi sovereign bonds by the Ministry of Finance is launched in Hong Kong.

February 2010

The HKMA issues a circular to streamline operations of Als in renminbi cross-border trade settlement.

June 2010

The geographical coverage of the renminbi trade settlement scheme is expanded.

July 2010

The Clearing Agreement on renminbi business is amended.

August 2010

Announcement of a pilot scheme for the Renminbi Clearing Bank and other eligible institutions outside the Mainland to invest in the Mainland's interbank bond market.

November 2010

Renminbi sovereign bonds are issued through the CMU.

December 2010

The number of eligible Mainland enterprises that can settle merchandise exports in renminbi expands by 184 times from 365 to 67,359.

January 2011

Mainland enterprises are allowed to conduct and settle ODI in renminbi, and Hong Kong banks can provide renminbi funds to facilitate such transactions.

Strengthening research on Mainland economic and financial issues

The growing financial integration with the Mainland and the expansion in the scope of offshore renminbi business have important implications for Hong Kong as an international financial centre. To fully develop this intermediary role of Hong Kong in facilitating financial reforms on the Mainland, the HKMA has undertaken studies to explore potential new areas of financial co-operation, and the use of Hong Kong as a platform for promoting the use of renminbi and contributing to policy formulation to strengthen cross-border economic and financial ties.

The HKMA also has frequent meetings and seminars with Mainland authorities, scholars and private-sector economists to keep abreast of the latest developments on the Mainland. More information on the HKMA's activities relating to renminbi business in Hong Kong and the Mainland business of locally incorporated Als can be found in the Chapter on Banking Stability.

Training

Training programmes for officials of the PBoC and the China Banking Regulatory Commission held in Hong Kong and on the Mainland continued to expand. During the year, 2,064 officials from the Mainland attended 22 courses (5,304 man-days) covering monetary policy; financial stability; banking supervision; management of human resources, accounting and internal control; macroeconomic analysis; financial risk management; payment and clearing systems; and prevention of money laundering. The HKMA also organised a regional course on risk management and internal controls under the APEC financial regulators' training initiative, and other courses for Mainland commercial banks for 170 participants.

Debt-market development

Proposed refinements to the Qualifying Debt Instruments Programme, announced by the Financial Secretary in his 2010 –11 Budget Speech, will be implemented through legislative amendments. These refinements will enhance the tax concessions for qualifying debt securities under the Programme to further develop the local debt market. The HKMA has been providing substantial assistance in the legislative process. A bill to amend the Inland Revenue Ordinance was passed by the Legislative Council in March 2011.

Government Bond Programme

The HKMA has also provided assistance in implementing the Government Bond Programme, which consists of both institutional and retail bond issuances. A total of seven tenders for the Institutional Programme, involving tenors of 2, 5 and 10 years, was completed in 2010. The bonds were well-received, attracting a diversified group of investors. The amount of institutional bonds outstanding at the end of 2010 was \$24 billion. The HKMA will maintain close contact with market players and consider measures to enhance the Institutional Programme.

In addition, necessary preparatory work has been completed to achieve maximum readiness for the launch of the Retail Programme. The HKMA will take into account the advice of the co-arranger banks – the Bank of China (Hong Kong)-HSBC consortium, and prevailing market conditions in drawing up the timing and details of the retail issues.

Development of Islamic finance

The HKMA continued to work closely with other agencies and the private sector to promote the development of Islamic finance in Hong Kong in four broad areas:

- establishing market infrastructure
- enhancing Hong Kong's profile as an emerging Islamic finance centre
- · promoting market knowledge of Islamic finance
- encouraging product development.

To nurture a larger pool of talent for the local Islamic financial industry, the HKMA organised a series of educational workshops and seminars on Islamic finance for market practitioners and university students in collaboration with local industry associations, such as the Treasury Markets Association (TMA), and various international organisations including the Islamic Financial Services Board. Response from the market has been positive. A legislative proposal to level the taxation playing field between common types of Islamic bonds (sukuk) and their conventional counterparts is being prepared. Moreover, the HKMA participated in a range of international Islamic finance forums to promote Hong Kong's Islamic financial platform, and strengthened co-operation with other Islamic financial centres like Malaysia. During the year, a global sukuk issue out of Malaysia was listed in Hong Kong.

Promotion of asset management business

To promote Hong Kong's asset management industry and reinforce its position as a leading asset management centre, the HKMA, together with other agencies, has been looking at ways to improve the international competitiveness of Hong Kong's financial markets and provide a more favourable tax and regulatory environment for such businesses. In conjunction with other agencies, the HKMA also took part in a joint promotional road show to London to highlight the strengths of Hong Kong's financial platform, focusing on its advantages in the process of the Mainland's gradual financial liberalisation and the wider external use of the renminbi.

OTC derivatives market regulation

In an effort to minimise systemic risk and promote transparency in the OTC derivatives market, the HKMA liaised with Hong Kong Exchanges and Clearing Limited (HKEx) to assess the feasibility of developing a local central counterparty (CCP) in Hong Kong. In December, the HKMA announced its plan to establish a local TR as a new service under the CMU to receive reports on OTC derivatives transactions, while HKEx also decided to develop the CCP. As a centralised registry that maintains an electronic database of records of OTC derivatives transactions, the TR will support regulatory authorities in performing their surveillance responsibilities.

This initiative will bring the local financial infrastructure into line with international standards recommended by the G-20 leaders at their 2010 Toronto Summit. Meanwhile, the HKMA monitored closely international regulatory developments for the OTC derivatives market and participated in various international forums, including the OTC Derivatives Working Group established under the FSB and the OTC Derivatives Regulators' Forum. As a member of the FSB OTC Derivatives Working Group, the HKMA helped prepare a report on Implementing OTC Derivatives Market Reforms, which developed recommendations to address issues that authorities may encounter when implementing the G-20's policy objectives in reforming the OTC derivatives market.

Treasury Markets Association

The HKMA worked closely with the market and provided strategic support to the TMA, whose mission is to further promote the professionalism and competitiveness of Hong Kong's treasury markets. The Association has 1,588 individual and 76 institutional members from banks, investment houses, insurance companies, money brokers and large corporations. Currently chaired by the HKMA's Deputy Chief Executive, Eddie Yue, the TMA achieved encouraging results in 2010:

 A thorough review was undertaken of the TMA's professional qualification framework and drafting began on its Code of Conduct and Practice to establish a new benchmark for market practitioners. The new professional qualification framework and Code will be implemented in 2011.

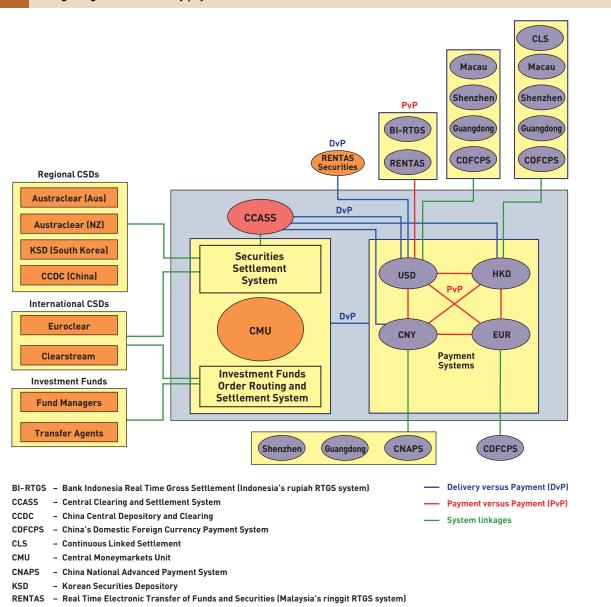
- A number of professional training courses were launched in collaboration with various universities, including the Professional Certificate in Treasury Markets (Derivatives and Structured Products), the Professional Course in Back Office Operations of Treasury Markets, and Treasury Markets Certificate and Model Code Examination organised for the Associate Member Upgrading Scheme. A series of e-learning programmes was also launched to promote distance learning and to enhance the Association's educational capacity on the Mainland and in Asia.
 More than 80 individuals took part in the professional courses and examinations launched by the TMA.
- About 50 seminars, workshops and talks were organised during the year for individual members and staff of institutional members to keep them abreast of market trends and developments.
- The TMA and the HKMA jointly organised the
 Treasury Markets Summit in Beijing in October to
 provide a forum for Mainland and Hong Kong market
 participants to understand more about the key themes
 driving the development of treasury markets in the
 current challenging environment. The TMA also
 supported a number of high-level international events,
 such as the Asian Financial Forum.

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 3).

Key achievements include the establishment of RTGS systems for the Hong Kong dollar, the US dollar, the euro and the renminbi, and developing bilateral links between the CMU and many regional and international central securities depositories (CSDs), such as Euroclear, Clearstream, and the depositories in Australia, New Zealand, South Korea and the Mainland.

Chart 3 Hong Kong's multi-currency payment and settlement infrastructure



Hong Kong dollar RTGS system

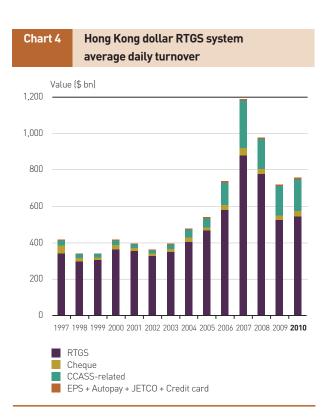
The Hong Kong dollar Clearing House Automated Transfer System (CHATS), which operates on an RTGS basis, is responsible for clearing all Hong Kong dollar interbank payments, and continues to run smoothly and efficiently. It has a direct link with the CMU to provide both real-time and end-of-day delivery-versus-payment (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 Hong Kong Association of Banks. In 2010, HKICL processed a daily average of \$545 billion in CHATS transactions (21,510 items), up 4% from 2009, probably reflecting the recovery in economic and financial activities.

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 ATM transfers (Chart 4).

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.

Foreign currency RTGS systems in Hong Kong

The US dollar, euro and renminbi RTGS systems have been operating smoothly since their launch. The average daily turnover value of the US dollar and renminbi RTGS systems grew in 2010. In particular, the turnover of the renminbi RTGS system increased substantially amid a surge in renminbi cross-border trade settlement and payment-versus-payment (PvP) transactions, and an increase in renminbi bond issuance activities in Hong Kong (Charts 5 – 7). The average daily turnover and other details of the foreign currency RTGS systems are listed in Table 1.



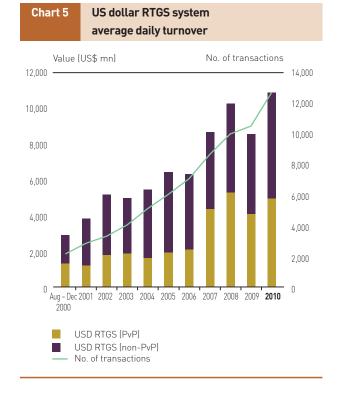


Chart 6 Euro RTGS system average daily turnover



Chart 7 Renminbi RTGS system average daily turnover

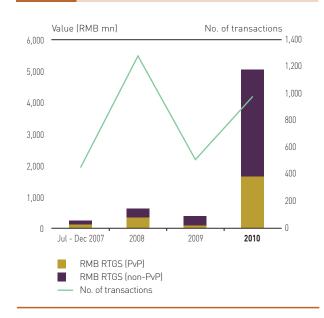


Table 1 Foreign currency RTGS systems

RTGS systems	Launch date	Settlement institution or Clearing Bank	Number of participants at the end of 2010	Average daily turnover in 2010	Average daily transactions in 2010
US dollar RTGS system	August 2000	The Hongkong and Shanghai Banking Corporation Limited	Direct: 81 Indirect: 143	US\$10.9 billion	12,637
Euro RTGS system	April 2003	Standard Chartered Bank (Hong Kong) Limited	Direct: 31 Indirect: 19	€580.7 million	362
Renminbi RTGS system	June 2007	Bank of China (Hong Kong) Limited	Direct: 96	RMB 5.0 billion	976

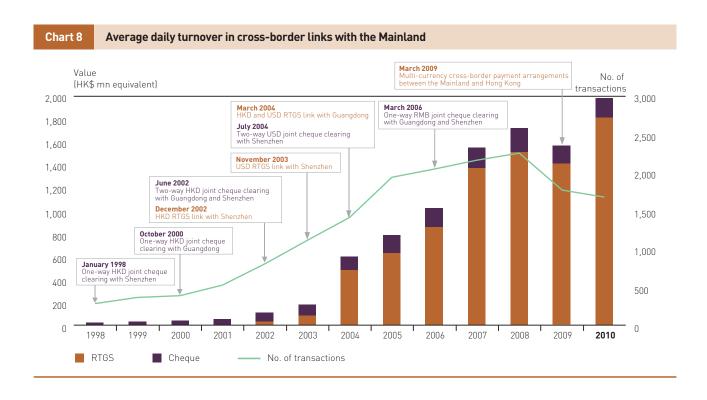
Payment-versus-payment

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 timezone differences (known as Herstatt risk). In 2010, the transaction value of Hong Kong dollar, US dollar, euro and

renminbi-related PvP transactions amounted to about \$5,020 billion, US\$1,229 billion, €10 billion and RMB409 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. The use of these services has risen gradually over the years. In 2010, the average daily turnover handled by the various system links was equivalent to around \$2 billion, including the RTGS cross-border links with the Mainland's Domestic Foreign Currency Payment Systems launched in March 2009 (Chart 8).



The RTGS system links with Shenzhen and Guangdong handled more than 21,000 transactions during the year, with a total value equivalent to \$427 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 372,000 Hong Kong dollar and US dollar cheques in 2010, with a value equivalent to \$41 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 2010, renminbi cheques with a total value equivalent to around \$40 million were cleared.

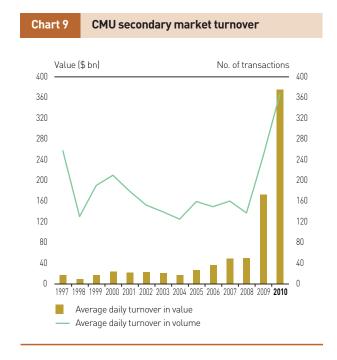
Payment links with Macau

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. In 2010, Hong Kong dollar cheques with a total value of over \$17 billion and US dollar cheques with a total value of over US\$14 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, overseas investors can hold and settle securities lodged with the CMU. They also help Hong Kong investors to hold and settle foreign securities held with overseas CSDs.

In 2010, the CMU processed an average daily value of \$375 billion (365 transactions) in secondary market transactions (Chart 9). Among the debt securities lodged with the CMU at the end of the year, the outstanding amount of EFBN was \$653 billion and the total amount of other securities was equivalent to \$347 billion.



Development of financial infrastructure in 2010

The HKMA completed a number of projects to promote the safety and efficiency of the financial infrastructure, and captured new business opportunities to further develop Hong Kong as a regional payment and settlement hub.

Payment-versus-payment link with Indonesia

A PvP link between Hong Kong's US dollar RTGS system and Indonesia's rupiah RTGS system was launched in January allowing simultaneous settlement of foreign-exchange transactions in US dollars and Indonesian rupiah in the Asian time zone, thereby enhancing settlement efficiency and eliminating Herstatt risk.

SWIFTNet migration project

The proprietary platform of the RTGS systems and CMU in Hong Kong was replaced with the open SWIFTNet platform after the launch of Phase 2 of the SWIFTNet migration project in July. It has improved real-time interactive user interfaces and greatly enhanced interoperability between domestic and international messages for payment instructions. The migration to SWIFTNet has removed barriers for overseas institutions to join the RTGS systems in Hong Kong, thus reinforcing its status as an international financial centre.

CMU fund order routing and settlement

The CMU Fund Order Routing and Settlement system became SWIFT compatible in April, opening up a new channel for straight-through processing of investment fund orders.

Same-day settlement of EPSCO and JETCO payment items

An afternoon bulk settlement run was introduced to the Hong Kong dollar RTGS system in September to enable same-day settlement of the small-value electronic payment items from EPS Company (Hong Kong) Limited (EPSCO) and Joint Electronic Teller Services Limited (JETCO), adding to the existing morning bulk settlement run for the previous day's items.

Hong Kong/Shenzhen cross-border one-way ioint direct debit transfer

The Hong Kong/Shenzhen cross-border one-way joint direct debit transfer arrangement was implemented in phases to provide a more efficient means for Hong Kong residents to make recurring payments, such as property management fees and utilities bills, to Shenzhen merchants. Phases 1 and 2 of the project were launched in August and September respectively to allow holders of Hong Kong dollar and renminbi China UnionPay (CUP) credit cards and Hong Kong dollar CUP debit cards issued in Hong Kong to make cross-border payments. Phase 3 for making payments through renminbi CUP debit cards is scheduled for launch in 2011.

Enhancement of the renminbi RTGS system

Improvements to the renminbi RTGS system were introduced in 2010 to capture new opportunities from the significant expansion of renminbi business in Hong Kong. This was given greater impetus with the implementation in July of the revised Settlement Agreement on the Clearing of Renminbi Businesses between the PBoC and the Clearing Bank of the renminbi RTGS system. The enhancements include:

introducing bulk settlement runs and real-time
DvP functions to the renminbi RTGS system in
September and November respectively to support
money settlement for the potential listing and trading
of renminbi-denominated securities on the Stock
Exchange of Hong Kong, and subsequent dividend
distributions

- a Regional CHATS Payment Service (RCPS), launched in the renminbi RTGS system in December, adds to the RCPS available in the Hong Kong dollar, US dollar and euro RTGS systems in Hong Kong. The RCPS leverages the extensive correspondent banking network of the participating banks to facilitate cross-border multicurrency payments using Hong Kong's RTGS systems. With the inclusion of the renminbi, the RCPS can outreach to Mainland markets, thus reinforcing Hong Kong's role as a regional payment hub
- implementing the RTGS Liquidity Optimiser (RLO)
 in December to enhance efficiency of the renminbi
 RTGS system by allowing interbank payments to be
 settled periodically on a multilateral basis. The RLO is
 a liquidity saving device that helps reduce the intraday
 liquidity needs of banks and clear gridlocks of payment
 instructions.

Promoting Hong Kong's financial infrastructure

Strengthening Hong Kong's position as a regional payment hub, leveraging the renminbi advantage, and ensuring that the financial infrastructure keeps pace with new developments in technology and standards were the major business development areas pursued during the year.

Strengthening Hong Kong as a regional payment hub

In 2010, the HKMA continued to lead the Pan-Asian CSDs' alliance project, which aims to develop a common post-trade processing infrastructure for Asian debt securities. A White Paper was published in June setting out the long-term vision of the Common Platform Model as well as the proposed launch of a Pilot Platform in the first half of 2011. Meetings were held with stakeholders, including central banks, finance ministries and CSDs in the region, global custodian banks and infrastructure platform providers to enable a better understanding of the White Paper initiatives and to obtain wider support. The task force on the Common Platform Model also convened two meetings to consider matters vital to the implementation of the Pilot Platform by mid-2011 and the gradual migration to the Model.

Leveraging the renminbi advantage

Hong Kong made solid progress in its development as a renminbi offshore centre. Encouraging growth was recorded in transactions and amounts cleared and settled in the renminbi RTGS system, with the average daily PvP transactions growing from a negligible amount to around RMB6.4 billion a day at the end of the year. The bulk of the renminbi transactions were against the US dollar with the remainder against the Hong Kong dollar. The number of direct participating banks in Hong Kong's renminbi RTGS system more than doubled to 96 in 2010 from 46 a year ago. These developments indicate an increasingly active offshore foreign-exchange market in renminbi. The impressive results are due partly to the HKMA's intense marketing campaigns, including promotional programmes organised in partnership with the Bank of China (Hong Kong) Limited and other major banks promoting Hong Kong's RCPS and cross-border renminbi trade settlement infrastructure. The HKMA attended or arranged 67 seminars and 260 marketing calls in various cities on the Mainland as well as in the Asia-Pacific region, Europe and North America.

Keeping pace with new developments

One way to strengthen Hong Kong's status as an international financial centre is to ensure that the existing financial infrastructure is in line with the latest developments in technology and standards. In response to the call by the BIS Committee on Payment and Settlement Systems to improve resilience in the repo market infrastructure and efforts by major banks to seek safer alternatives to unsecured interbank lending, a project was initiated to upgrade the CMU's bank-to-bank repo infrastructure to help the industry develop an active bank repo market in Hong Kong. A consultation exercise in June resulted in support from key market players. The enhanced CMU bank-to-bank repo platform, expected to be launched by the end of 2011, will take into account requirements and feedback collected from the primary dealer community in Hong Kong.

PLANS FOR 2011 AND BEYOND

The expectation of a slow recovery in the global economy and concerns about debt sustainability in the advanced economies will continue to cloud global financial markets in 2011. Capital inflows into the region arising from excess global liquidity also increase the risk of financial instability. All these highlight the importance of co-operation for improving financial stability and surveillance. The HKMA will continue to spearhead the macro-surveillance work for the EMEAP MFSC. Participation in central banking and international financial forums remains a priority of the HKMA to ensure Hong Kong's views are heard, and to keep abreast of the latest developments. Following the achievement of an AAA credit rating from S&P, the HKMA will pursue further upgrades of Hong Kong's credit ratings by other major international credit rating agencies.

Strengthening financial co-operation with the Mainland is important to enhancing Hong Kong's competitiveness as an international financial centre. The HKMA will discuss and liaise with Mainland authorities on issues related to the continued development of renminbi business in Hong Kong, and to expand CEPA to increase the financial integration between Hong Kong and the Mainland. Following expansion of the use of renminbi for trade settlement and ODI, other initiatives will be pursued to enhance the fuller circulation of renminbi funds, including the use of renminbi to conduct foreign direct investment on the Mainland. To help promote the wider use of renminbi outside the Mainland and to extend the outreach of Hong Kong's renminbi trading platform to the international community, the HKMA is preparing a series of road shows to introduce the renminbi services provided by Hong Kong to overseas investors, companies and financial institutions in 2011.

The renminbi RTGS system will be further improved to enable Hong Kong to tap into new business opportunities likely to result from the revised Settlement Agreement on the Clearing of Renminbi Businesses. Additional steps will also be taken to capitalise on the increasing demand in intra-regional trade denominated in Asian currencies (particularly the renminbi), cross-border/cross-currency transactions, and retail payments by electronic means. This includes working with central banks and CSDs in the Asia-Pacific region and Euroclear to launch a pilot platform for cross-border bond transactions in mid-2011 and, in conjunction with banking and related service providers, to enhance the electronic retail payment infrastructure in Hong Kong.

The HKMA will continue to support the Government's initiatives in further developing the local debt market and the Islamic finance sector, and in implementing the Government Bond Programme to broaden its investor base and establish a liquid and representative yield curve.

To meet international standards and to ensure the smooth implementation of reforms to the OTC derivatives market by the end of 2012, the HKMA will work with other agencies to facilitate the development of regulatory framework for the OTC derivatives market in Hong Kong, in terms of introducing clearing and reporting requirements on OTC derivatives transactions. The HKMA will maintain close contact with market participants to collect opinion on issues related to the development of the regulatory framework for the OTC derivatives market in Hong Kong. Subject to the timely establishment of the relevant international standards, the bulk of the system development work for the local TR for OTC derivatives is expected to be completed during the year.

Finally, the HKMA will work closely with other agencies and the private sector to consider and implement initiatives that will reinforce the competitiveness of Hong Kong's financial markets to strengthen its position as an international financial centre.