

# Monetary Stability

The Hong Kong dollar exchange rate traded in an orderly manner in 2014 despite volatile global financial markets. Hong Kong's money market continued to function normally with ample liquidity. The Linked Exchange Rate system has proved highly resilient to external shocks and continued to serve as the anchor for Hong Kong's monetary and financial stability.

## OBJECTIVES

The overriding objective of Hong Kong's monetary policy is currency stability. This is defined as a stable external exchange value of Hong Kong's currency, in terms of its exchange rate in the foreign exchange market against the US dollar, within a band of HK\$7.75 – 7.85 to US\$1. The structure of the monetary system is characterised by Currency Board arrangements, requiring the Monetary Base to be at least 100% backed by US dollar reserves held in the Exchange Fund, and changes in the Monetary Base to be 100% matched by corresponding changes in US dollar reserves.

The Monetary Base (Table 1) comprises:

- Certificates of Indebtedness, which provide full backing to the banknotes issued by the three note-issuing banks
- Government-issued notes and coins in circulation
- the Aggregate Balance, which is the sum of clearing account balances of banks kept with the HKMA
- Exchange Fund Bills and Notes issued by the HKMA on behalf of the Government.

The stability of the Hong Kong dollar exchange rate is maintained through an automatic interest rate adjustment mechanism and the firm commitment by the HKMA to honour the Convertibility Undertakings (CUs). When the demand for Hong Kong dollars is greater than the supply and the market exchange rate strengthens to the strong-side CU of HK\$7.75 to the US dollar, the HKMA stands ready to sell Hong Kong dollars to banks for US dollars. The Aggregate Balance will then expand to push down Hong Kong dollar interest rates, creating monetary conditions that move the Hong Kong dollar away from the strong-side limit to within the Convertibility Zone of 7.75 to 7.85. Conversely, if the supply of Hong Kong dollars is greater than demand and the market exchange rate weakens to the weak-side CU of HK\$7.85 to the US dollar, the HKMA will buy Hong Kong dollars from banks. The Aggregate Balance will then contract to drive Hong Kong dollar interest rates up, pushing the Hong Kong dollar away from the weak-side limit to stay within the Convertibility Zone.

**Table 1** Monetary Base

\$ million	31 December 2014	31 December 2013
Certificates of Indebtedness <sup>1</sup>	342,165	329,325
Government-issued currency notes and coins in circulation <sup>1</sup>	11,092	10,638
Balance of the banking system	239,183	164,093
Exchange Fund Bills and Notes (EFBN) issued <sup>2</sup>	753,546	751,850
<b>TOTAL</b>	<b>1,345,986</b>	1,255,906

<sup>1</sup> The Certificates of Indebtedness and the government-issued notes and coins in circulation shown here are stated at Hong Kong dollar face values. The corresponding items shown in the balance sheet of the Exchange Fund in this Annual Report are in Hong Kong dollars equivalent to the US dollar amounts required for their redemption at the prevailing exchange rates on the balance sheet date. This arrangement is in accordance with the accounting principles generally accepted in Hong Kong.

<sup>2</sup> The amount of EFBN shown here is different from that in the balance sheet of the Exchange Fund in this Annual Report. In accordance with the accounting principles generally accepted in Hong Kong, the EFBN held by the HKMA on behalf of the Exchange Fund in relation to its trading of the EFBN in the secondary market are offset against the EFBN issued, and the net amount is recorded in the balance sheet. The EFBN issued on tender dates but not yet settled are included in the balance sheet but excluded from the Monetary Base.

# Monetary Stability

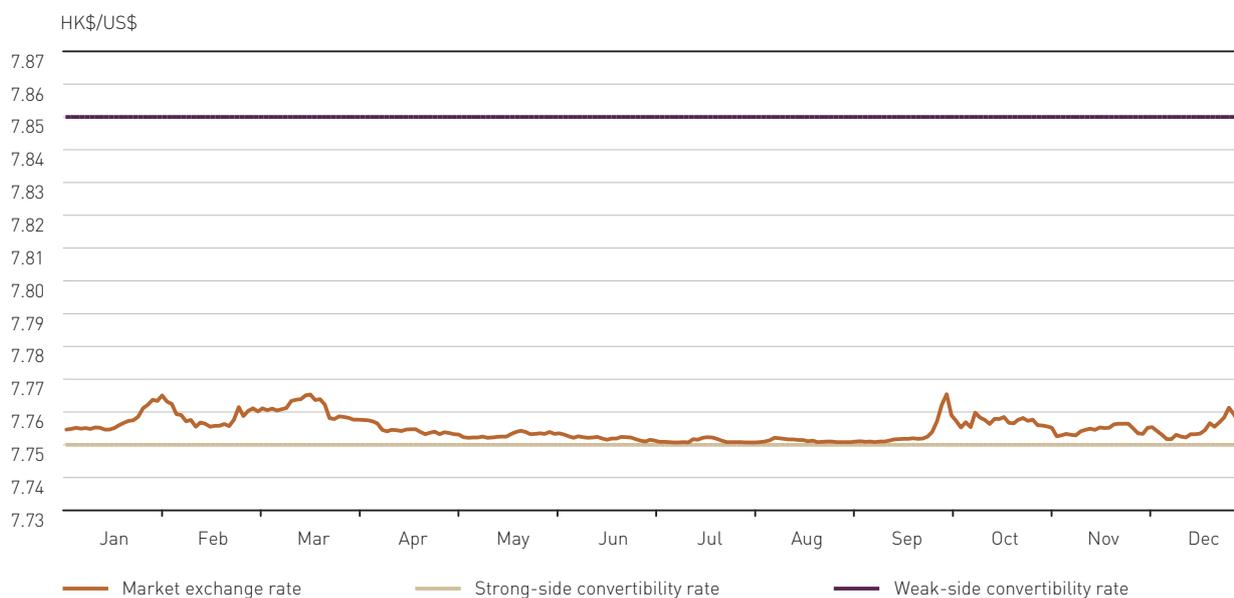
## REVIEW OF 2014

### Exchange-rate stability

The Hong Kong dollar exchange rate traded within a narrow range between 7.7500 and 7.7657 against the US dollar, while activities in the local foreign exchange market remained orderly throughout the year (Chart 1). In the early part of 2014, the Hong Kong dollar softened slightly, in part reflecting weaker equity-related demand due to concerns about the tapering of asset purchases by the US Federal Open Market Committee and weaker growth prospects for Mainland China's economy. From April onwards, the Hong Kong dollar exchange rate strengthened and stayed close to 7.75. In particular, the strong-side CU was triggered repeatedly in July and

early August, prompting the HKMA to passively purchase a total of US\$9.7 billion from banks in exchange for HK\$75.3 billion. This led to a corresponding increase in the Aggregate Balance in accordance with the Currency Board principles. The strengthening of the Hong Kong dollar during this period was largely underpinned by equity-related demand and strong commercial demand arising from dividend distributions and cross-border merger and acquisition transactions. In the fourth quarter, the Hong Kong dollar exchange rate softened modestly amid the broad strength of the US dollar and repatriation abroad of equity fund-raising proceeds. Currency stability of the Hong Kong dollar remained intact despite increased volatility on global financial markets and depreciation pressures in emerging-market currencies in December.

**Chart 1** Market exchange rate in 2014

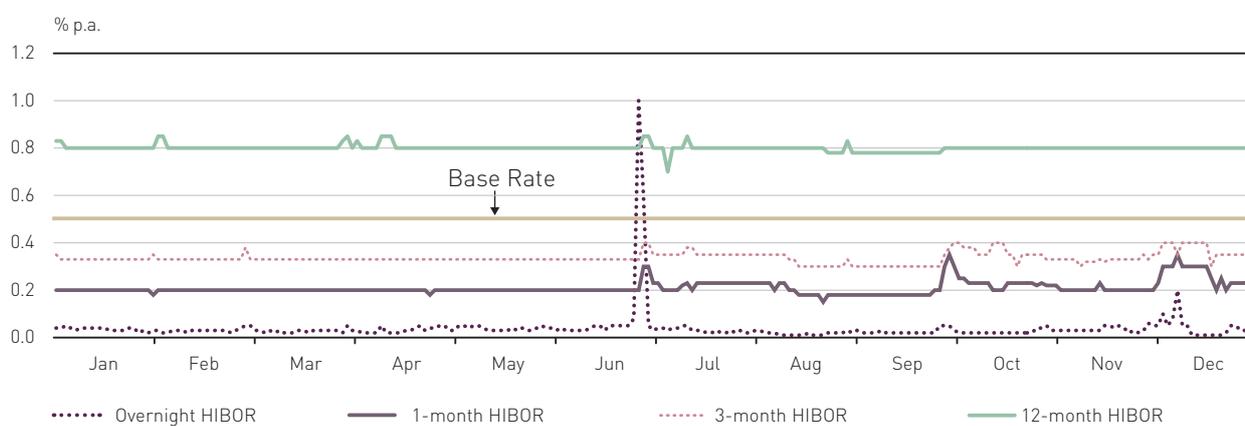


## Money market

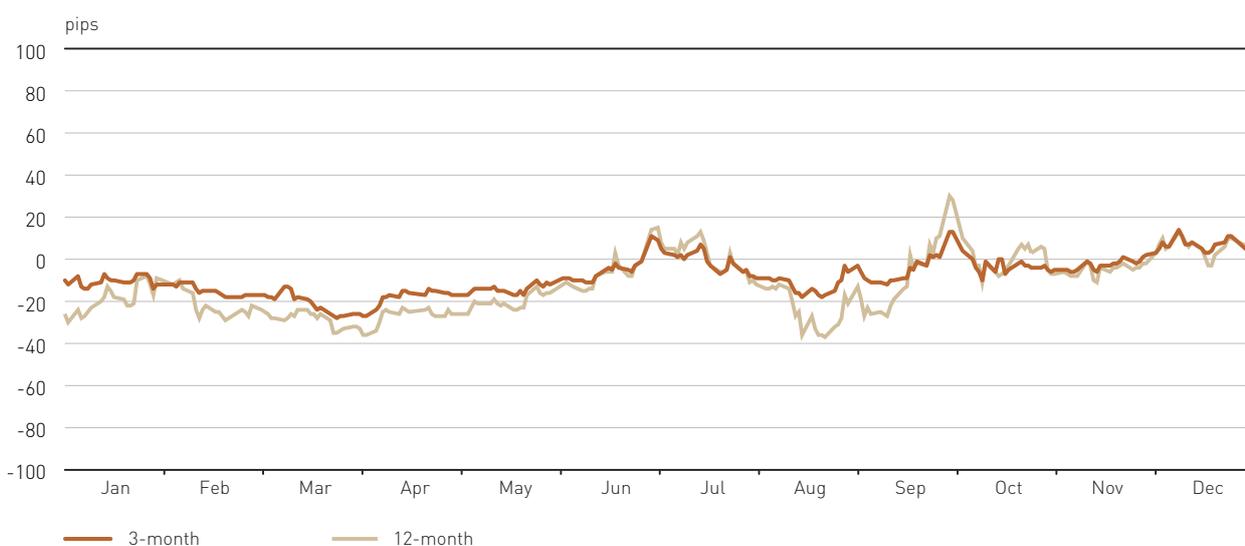
The Hong Kong dollar interbank interest rates continued to stay at low levels in 2014 (Chart 2). There were intermittent fluctuations due to increased demand for equity funding and banks' liquidity needs prior to the end of each quarter and holiday seasons. The Hong Kong dollar forward points narrowed gradually and turned occasionally from discounts to small premiums, broadly consistent with the movements in the Hong Kong Interbank Offered Rate

(HIBOR) — London Interbank Offered Rate (LIBOR) spreads (Chart 3). This partly reflected an increase in banks' liquidity needs, with some interbank participants tapping Hong Kong dollar funding in the swap market through collateralised term funding. Overall, the money market operated smoothly and without disorderly adjustments. The short-term interbank interest rate remained well below the Base Rate of 0.5%. Discount Window borrowing was not active and amounted to \$1.9 billion in 2014.

**Chart 2** Hong Kong dollar interbank interest rates in 2014



**Chart 3** Hong Kong dollar forward points in 2014



# Monetary Stability

## The Linked Exchange Rate system

The Linked Exchange Rate system (LERS) has served Hong Kong well since 1983 as the anchor for monetary and financial stability and has proved to be highly resilient in a series of regional and global financial crises. The Hong Kong SAR Government is firmly committed to the LERS, which continues to best suit Hong Kong as a small and open economy and an international financial centre. Stability in the foreign exchange and money markets further reinforces the credibility of the Government's commitment to the System. There is also continued strong public confidence in the Hong Kong dollar as a means of payment and storage of value. In addition, the International Monetary Fund (IMF) strongly endorsed the LERS in its Financial Sector Assessment Program (FSAP) and the 2014 Article IV consultation with Hong Kong, describing it as a credible, transparent, and effective exchange rate regime which, combined with robust and proactive financial supervision and regulation, prudent fiscal management, and flexible markets, has worked well to help Hong Kong successfully weather changing global conditions.

A sound banking system is crucial to the normal functioning of the LERS. During the year, the HKMA continued to monitor closely banks' management of credit and liquidity risks, property-related lending and stress test results to ensure the resilience of the banking sector.

Since October 1998, a specific portion of the Exchange Fund's assets has been allocated to back the Monetary Base to improve the transparency of the Currency Board Account. The Backing Ratio (defined as the Backing Assets divided by the Monetary Base) moved within a narrow range of 107-108% during 2014, without touching the Upper or Lower Trigger Level. The ratio closed at 107.3% on 31 December 2014 (Chart 4). While specific Exchange Fund assets have been designated for the Backing Portfolio, all Exchange Fund assets are available to support the Hong Kong dollar exchange rate under the LERS. The large amount of financial resources under the Fund provides a powerful backstop in protecting Hong Kong's monetary and financial stability.

**Chart 4** Daily movement of the Backing Ratio in 2014



## Other Activities

The Exchange Fund Advisory Committee (EFAC) Currency Board Sub-Committee monitors and reviews issues relevant to monetary and financial stability in Hong Kong. In 2014, the Sub-Committee considered issues including monetary policy normalisation in the US, developments in capital flows in East Asia, shadow banking in Mainland China, and the streamlining of the Exchange Fund Bills and Notes Programme and the Government Bonds Programme. Records of the Sub-Committee's discussions and the reports on Currency Board operations submitted to the Sub-Committee are published on the HKMA website.

The Hong Kong Institute for Monetary Research (HKIMR) continued to sponsor research in the fields of monetary policy, banking and finance. In 2014, the Institute hosted 20 research fellows, published 32 working papers and one occasional paper.

The Institute organised six international conferences and workshops. The main ones included:

- The Fifth Annual International Conference on the Chinese Economy in January, which focused on "Price Reforms and Factor Markets Liberalisation in the Chinese Economy". Eight high quality research papers were presented covering a wide range of issues, including bank competition in China, interest rate determination, capital account liberalisation, labour productivity and regulation, China's economic transition, and renminbi internationalisation.
- The HKMA and the Federal Reserve Bank of New York joint conference in March on "Domestic and International Dimensions of Unconventional Monetary Policy". This conference brought together economists from academia and central banks to review and assess theoretical and empirical aspects of unconventional monetary policies, such as asset purchases, quantitative and credit easing, forward guidance on

the policy rate path, funding for lending schemes and related interventions. The conference also featured a speech by Professor Chris Sims (2011 Nobel Laureate in Economics) entitled "Do Central Bank Balance Sheets Matter?"

- The HKIMR, the Institute for New Economic Thinking (INET), and the Centre for International Governance Innovation (CIGI) joint conference on "China and the World Economy: Trade and Financial Linkages" in June. This conference covered topics including China's influence in global trade, China's role in the global commodities market, interest rate liberalisation, monetary policy framework, renminbi internationalisation, and China's capital account liberalisation.
- The Fourth Annual Meeting of the Asian Central Banks Watchers Group organised jointly with the Official Monetary and Financial Institutions Forum (OMFIF) in December, with the theme "Internationalisation of the Renminbi: Implications for World Finance". The conference examined a wide range of issues relating to the renminbi, including the growing importance of its internationalisation for the world economy, its role in international reserves management and other official sector financial transactions, its role in international capital markets, trade financing and investment, and the future challenges and opportunities for renminbi internationalisation.

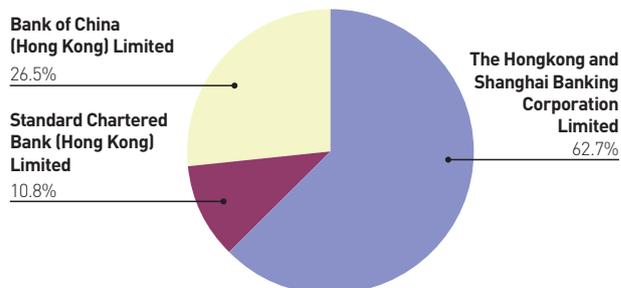
The Institute also hosted its 12th HKIMR Summer Workshop in August, and the 12th HKIMR Conference on the Mainland Economy on shadow banking and financial innovation in China. The conferences and workshops were attended by participants from academia, the financial services industry and global central banks. In addition, the Institute held 33 public seminars during the year covering a broad range of economic, monetary and financial issues.

# Monetary Stability

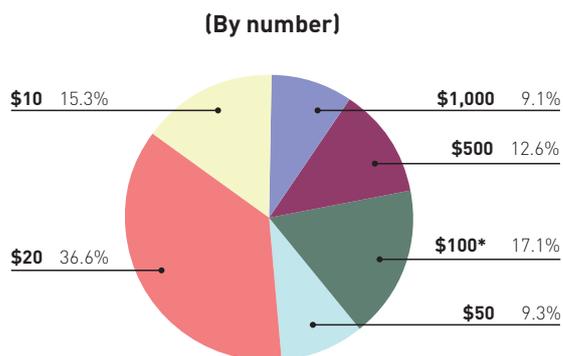
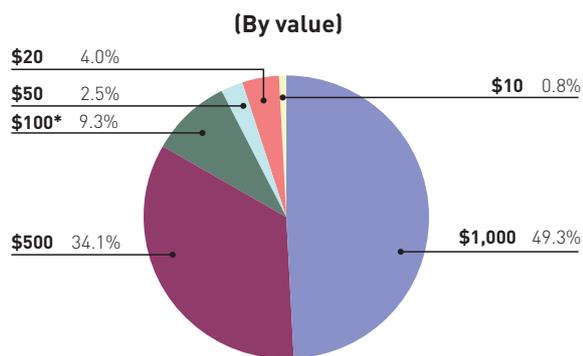
## Notes and coins

At the end of 2014, the total value of banknotes in circulation was \$342.2 billion, an increase of 3.9% from a year earlier (Charts 5, 6 and 7). The total value of government-issued notes and coins in circulation amounted to \$10.9 billion, up 4.4% (Charts 8 and 9). The value of the government-issued \$10 notes in circulation reached \$3.9 billion, of which 77% are polymer notes.

**Chart 5 Banknotes in circulation by note-issuing banks at the end of 2014**

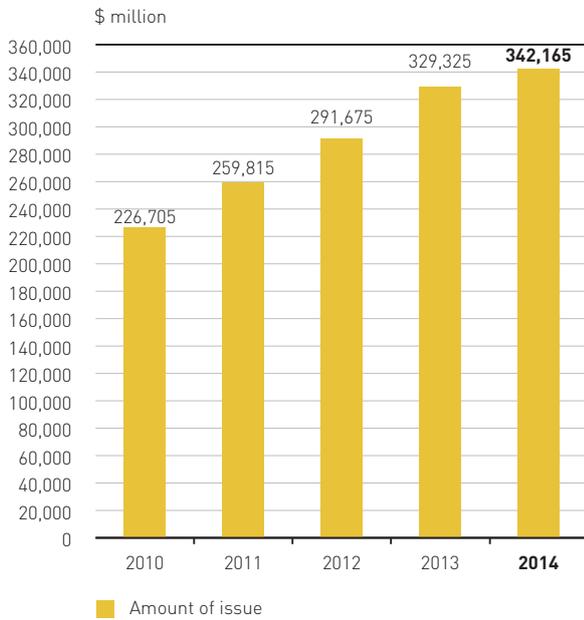


**Chart 6 Distribution of banknotes in circulation at the end of 2014**

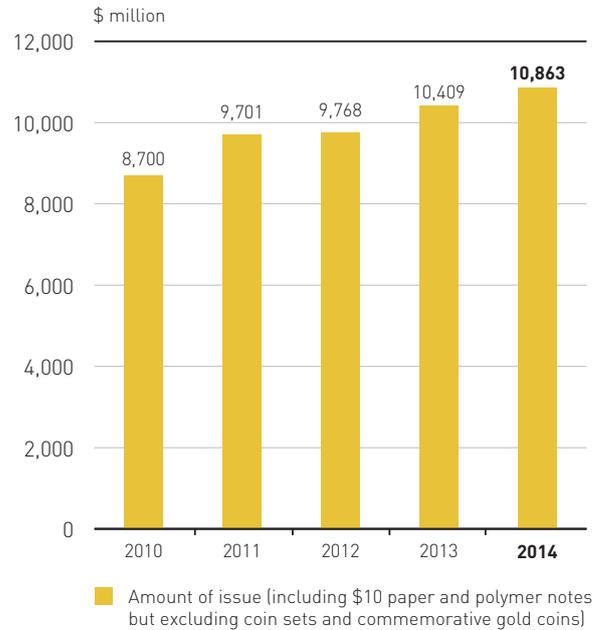


\* Includes 0.1 percentage point contributed by \$150 banknotes.

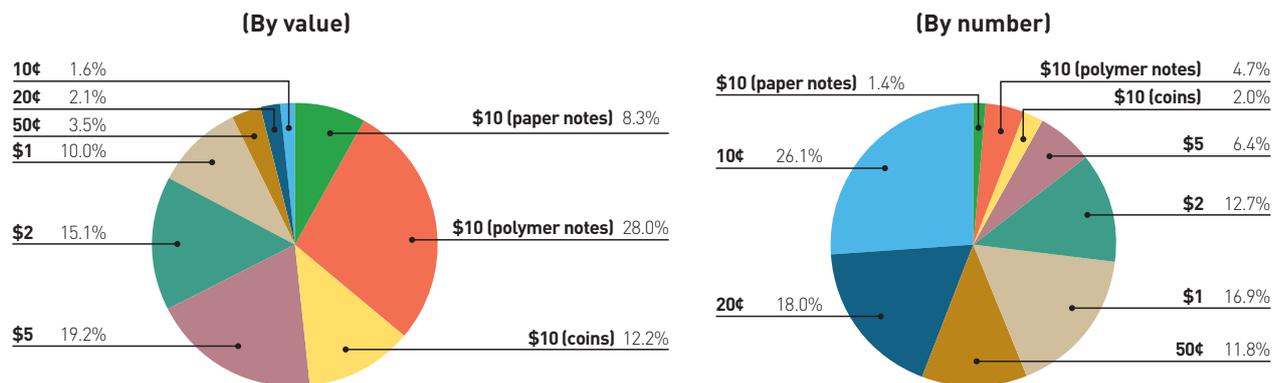
**Chart 7 Banknotes in circulation at the end of 2014**



**Chart 8 Government-issued notes and coins in circulation at the end of 2014**



**Chart 9 Government-issued notes and coins in circulation at the end of 2014**



# Monetary Stability

## Hong Kong banknotes

Some high quality counterfeit notes of the 2003 series \$1,000 banknote first surfaced in December 2013. The HKMA responded swiftly with a series of publicity programmes and education seminars on how to identify the counterfeit notes, as well as other contingency measures such as replacement or recalibration of cash deposit machines. The number of these fake notes seized by the Police subsequently fell quickly and fewer than 500 pieces were found up to the end of 2014. Banks also expedited the replacement of the 2003 series with the 2010 series, which incorporates more advanced security features.

The Hong Kong currency remains one of the most secure against counterfeiting. The total number of counterfeit notes found in 2014 was less than one piece per one million banknotes in circulation, which is very low by international standards. As public knowledge is the best defence against counterfeiting, the HKMA continued its public education campaign to promote awareness of the design and security features of Hong Kong's banknotes. During the year, it held 55 seminars on how to authenticate banknotes for over 11,000 participants, including bank tellers, retailers and students.

## Coin Collection Programme

In September, Hong Kong launched the world's first structured coin collection scheme using a mobile approach under a two-year pilot Coin Collection Programme. The

Programme provides a way for members of the public to get value for their surplus coins in addition to the existing banking system. The coins collected will be re-circulated to meet public demand, making circulation more efficient and reducing the need for minting new coins.

Two collection vehicles, known as "Coin Carts", collect coins from the public in all 18 districts in Hong Kong on a rotational basis and free of charge. Each vehicle is equipped with two high-speed coin counting machines, and an electric wheelchair lift. There are also operational staff stationed at the vehicles to provide assistance. Users can choose to exchange their spare coins for banknotes or add value to their Octopus cards. A Community Chest donation box is also inside each vehicle. The exterior design of the Coin Carts was chosen from the winner of the "Mobile Coin Collection Kiosk Design Competition" among secondary school students. The two-year pilot Coin Collection Programme runs until September 2016, when it will be subject to review.

The programme has been well received by the public and is considered an innovative and environmentally-friendly scheme to enhance the circulation of coins. From its start in early October to the end of 2014, the two Coin Carts had served 50,000 people, collecting 46 million coins with a total face value of \$41 million. Further details of the programme and up-to-date information, including the service schedule of the Coin Carts, are available on a designated page on the HKMA website ([coincollection.hkma.gov.hk](http://coincollection.hkma.gov.hk)).



Chief Executive of the HKMA, Mr Norman Chan, presents a certificate to the winner of the "Mobile Coin Collection Kiosk Design Competition", Wong Yiu-man, from Shun Tak Fraternal Association Tam Pak Yu College.



Two Coin Carts collect coins from the public at Upper Ngau Tau Kok Estate.

## Exchange Fund Bills and Notes

The HKMA announced in December that the issuance of Exchange Fund Notes and Government Bonds would be streamlined to minimise overlap in the longer tenors and to establish a single benchmark yield curve. Starting from January 2015, new issuance of Exchange Fund Notes with tenors of three years or above will cease. Maturing Exchange Fund Notes of those tenors will be replaced by additional Exchange Fund Bills to maintain the overall size of Exchange Fund paper. At the same time, new issuance of two-year Government Bonds will cease and the new issuance of Government Bonds will confine to tenors of three years and above. The amount of these new issuances of Government Bond will be suitably increased to meet investors' demand for longer term high-quality Hong Kong dollar bonds. At the end of 2014, the amount of outstanding Exchange Fund paper stood at \$752.6 billion (Table 2).

## PLANS FOR 2015 AND BEYOND

The global macro-financial environment is expected to be challenging in 2015 in view of the uncertain and divergent monetary policies of the major advanced economies. The

US Federal Reserve is expected to raise policy rate but the timing and pace remained uncertain. Meanwhile, other major central banks, including the European Central Bank and the Bank of Japan have embarked on further monetary easing. On the whole, it is likely that monetary conditions across the globe, including Hong Kong, will remain accommodative in the short term. However, as the Federal Reserve starts raising the policy rate, monetary conditions in Hong Kong will inevitably tighten under the LERS, and while the outcome is far from clear, fund flows could be more volatile and asset prices under greater pressure.

The HKMA will continue to closely monitor risks and vulnerabilities in the domestic and external environment and stands ready to deploy appropriate measures if necessary to maintain Hong Kong's monetary and financial stability. Research programmes in 2015 will study issues affecting the Hong Kong economy and assess their potential risks. The EFAC Currency Board Sub-Committee will continue to examine issues relevant to Hong Kong's monetary and financial stability, review the technical aspects of the Currency Board arrangements and, where appropriate, recommend measures to enhance them.

**Table 2** Outstanding issues of Exchange Fund Bills and Notes

\$ million	2014	2013
Exchange Fund Bills (by original maturity)		
28 days	0	0
91 days	400,730	399,851
182 days	241,000	241,000
364 days	42,200	42,200
Sub-total	<b>683,930</b>	683,051
Exchange Fund Notes (by remaining tenor)		
1 year or below	14,900	15,800
Over 1 year and up to 3 years	25,600	25,300
Over 3 years and up to 5 years	11,200	11,200
Over 5 years and up to 10 years	11,000	9,800
Over 10 years	6,000	6,000
Sub-total	<b>68,700</b>	68,100
<b>Total</b>	<b>752,630</b>	751,151