

Monetary Stability



The Hong Kong dollar exchange rate and money markets functioned in a smooth and orderly manner in 2019. The Hong Kong dollar exchange rate remained stable throughout the year and strengthened to the strong side of the Convertibility Zone towards the end of the year. As the cornerstone of Hong Kong's monetary and financial stability, the Linked Exchange Rate System has shown its resilience to shocks time after time.

Monetary 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 the clearing account balances of banks kept with the HKMA
- ◆ Exchange Fund Bills and Notes (EFBNs) issued by the HKMA on behalf of the Government.

Table 1 Monetary Base

HK\$ million	31 December 2019	31 December 2018
Certificates of Indebtedness ¹	516,605	483,845
Government-issued currency notes and coins in circulation ¹	13,001	12,592
Balance of the banking system ²	54,288	76,398
EFBNs issued ³	1,078,748	1,059,801
TOTAL	1,662,642	1,632,636

1. The Certificates of Indebtedness and the government-issued currency 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 at the reporting date. This arrangement is in accordance with the accounting principles generally accepted in Hong Kong.
2. Balance of the banking system shown here is the carrying value before the amount advanced to the banks under the Discount Window Operations. In accordance with the accounting principles generally accepted in Hong Kong, the corresponding item shown in the balance sheet of the Exchange Fund in this Annual Report includes the amount of these advances.
3. The amount of EFBNs shown here refers to their fair value. In accordance with the accounting principles generally accepted in Hong Kong, the EFBNs held by the HKMA on behalf of the Exchange Fund in relation to its trading of the EFBNs in the secondary market are offset against the EFBNs issued, and the net amount is recorded in the balance sheet. The EFBNs allotted on tender dates but not yet settled are included in the balance sheet but excluded from the Monetary Base. Therefore, the amount of EFBNs shown here is different from that in the balance sheet of the Exchange Fund in this Annual Report.

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 one US dollar, the HKMA stands ready to sell Hong Kong dollars to banks for US dollars upon request. 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 one US dollar, the HKMA stands ready to buy Hong Kong dollars from banks upon request. 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.

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REVIEW OF 2019

Exchange rate stability

Despite uncertainties in the external environment and a slowdown in the domestic economy, the Hong Kong dollar remained stable and traded in a smooth and orderly manner in 2019. In the beginning of the year, the widening negative Hong Kong dollar-US dollar interest rate spreads attracted carry trade activities of selling Hong Kong dollars for US dollars, pushing the Hong Kong dollar exchange rate towards the weak-side CU of 7.85 (Chart 1). As the weakening of the Hong Kong dollar exchange rate continued, the weak-side CU was eventually triggered eight times in March. Thereafter, the Hong Kong dollar continued to stay

near the weak-side CU rate of 7.85. Since late May, the strong Hong Kong dollar demand arising from sizeable initial public offering (IPO) activities, corporates' demand for dividend payment and the half-year closing had led the Hong Kong dollar to strengthen. While the Hong Kong dollar drifted lower after the half-year mark, it regained momentum from late October and stayed in the strong side of the Convertibility Zone towards the end of the year. This reflected partly equity-related demand including IPOs, and partly the unwinding of short Hong Kong dollar positions due to tightened liquidity near the year end. Overall, the Hong Kong dollar exchange market functioned normally throughout 2019.

Chart 1 Market exchange rate in 2019



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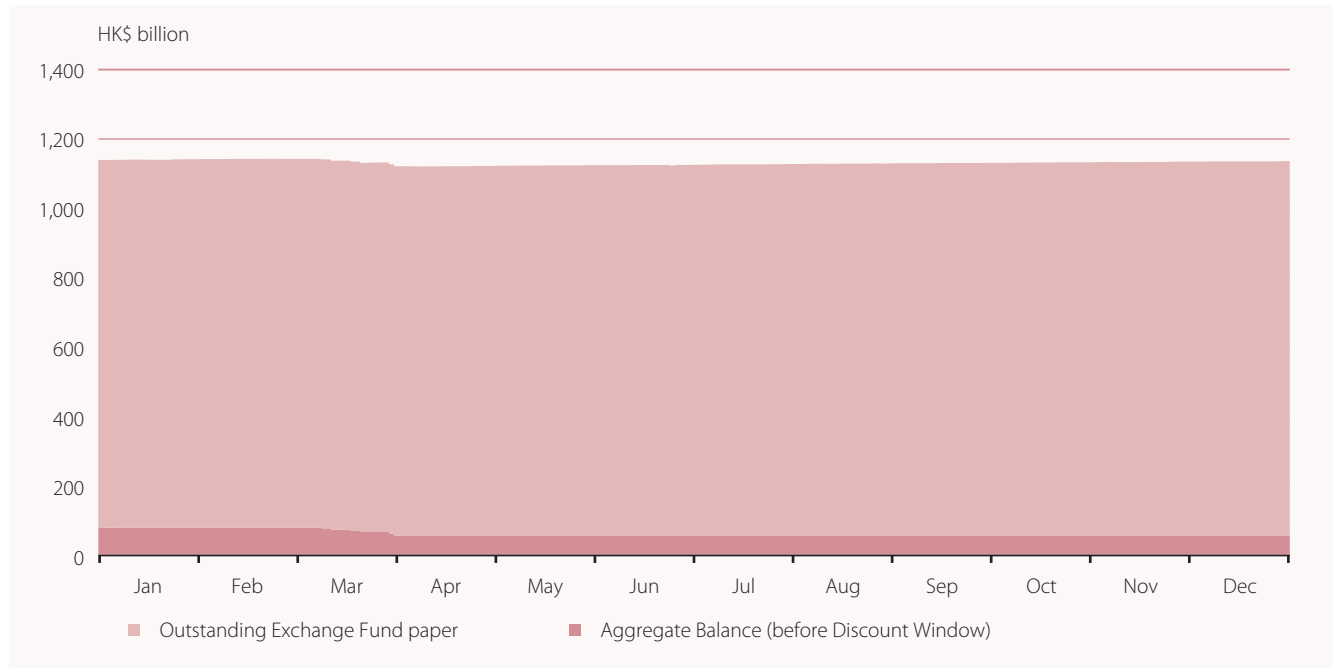
Due to the triggering of the weak-side CU, the total of the Aggregate Balance (before Discount Window) and outstanding EFBNs declined from HK\$1,136.2 billion at the end of 2018 to HK\$1,133.0 billion at the end of 2019 (Chart 2). During the year, the HKMA purchased a total of HK\$22.1 billion at the request of banks at the weak-side CU of 7.85 in accordance with the design of the Linked Exchange

Rate System (LERS), leading to a contraction of the Aggregate Balance (before Discount Window) from HK\$76.4 billion at the end of 2018 to HK\$54.3 billion at the end of 2019. The outstanding EFBNs increased slightly from HK\$1,059.8 billion to HK\$1,078.7 billion during the year, reflecting the issuance of EFBNs to absorb EFBNs' interest payments according to the established practice. The Monetary Base as a whole remained fully backed by foreign exchange reserves.



Total Aggregate Balance (before Discount Window) and outstanding Exchange Fund Bills and Notes at **HK\$1,133 billion** at end-2019.

Chart 2 Aggregate Balance (before Discount Window) and outstanding Exchange Fund papers in 2019



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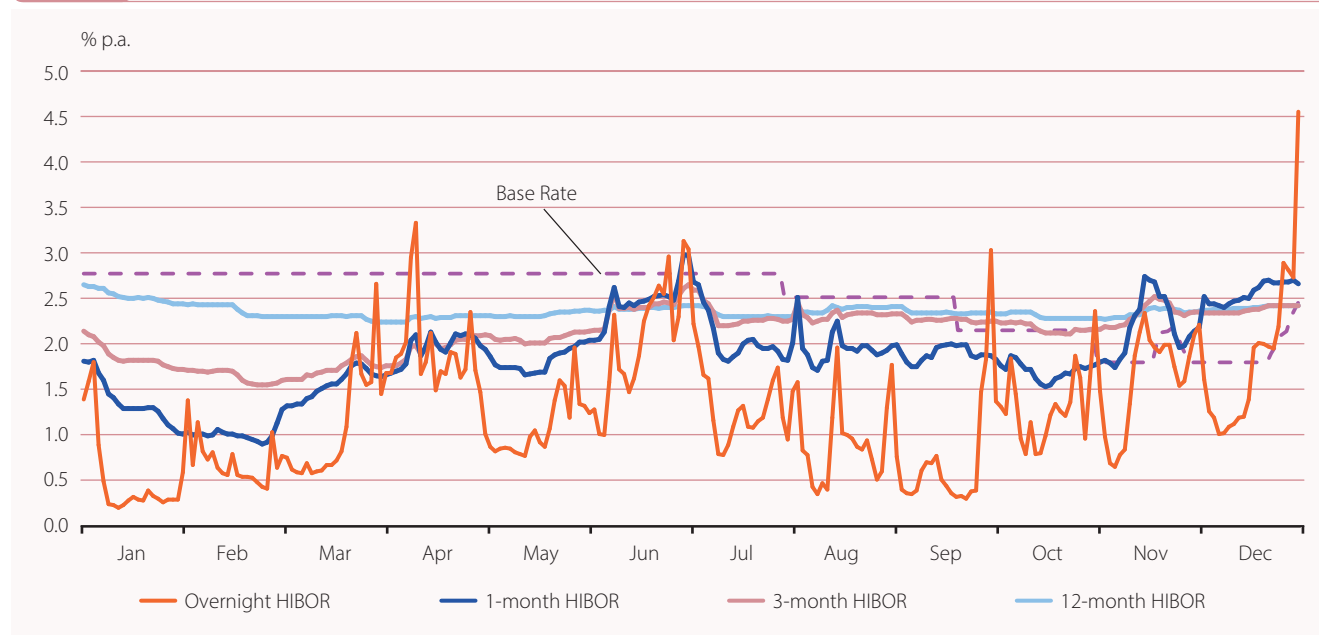
Money market

During 2019, the Hong Kong dollar interbank interest rates remained largely steady at the longer end, while short-term rates broadly picked up (Chart 3). Short-term rates also experienced more fluctuations driven by IPO-related funding demand and seasonal liquidity needs. The reduction in the Aggregate Balance since April 2018 may have led to a higher sensitivity of the Hong Kong dollar interbank rates to changes in the supply and demand of Hong Kong dollar funding in the local market.

The Base Rate was adjusted downwards on 1 August, 19 September and 31 October by a total of 75 basis points, from 2.75% at the end of 2018 to 2.00% in early November, as the target range for the US federal funds rate moved downward three times by a total of 75 basis points from 2.25–2.50% to

1.50–1.75% during the year. On 18–26 November and 19–31 December, the Base Rate was set higher than 2.00%, reflecting a marked upward trend of the overnight and one-month Hong Kong Interbank Offered Rates (HIBORs) in the last two months of the year. As such, the Base Rate closed at 2.49% at the end of 2019. The adjustment of the Base Rate was in accordance with the revised formula announced on 26 March 2009, which sets the Base Rate at either 50 basis points above the lower bound of the prevailing target range for the US federal funds rate or the average of the five-day moving averages of the overnight and one-month HIBORs, whichever is the higher. On the retail front, several retail banks lowered their Best Lending Rates by 12.5 basis points following the decrease in the target range for the US federal funds rate in late October.

Chart 3 Hong Kong dollar interbank interest rates in 2019



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The discounts of the Hong Kong dollar forward points widened during the first two months, broadly tracking the movements of the Hong Kong dollar-US dollar interest rate spreads, with the 12-month Hong Kong dollar forward points reaching about -708 pips in mid-February (Chart 4). Thereafter, along with the narrowing of the negative Hong

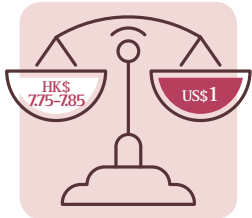
Kong dollar-US dollar interest rate spreads, the discounts of the Hong Kong dollar forward points narrowed gradually and turned to premiums towards the end of the year. Overall, Hong Kong's money markets operated in an orderly manner. Discount Window borrowing decreased to HK\$38.3 billion in 2019 from HK\$40.2 billion in 2018.

Chart 4 Hong Kong dollar forward points in 2019



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The Linked Exchange Rate System



The LERS has contributed significantly to Hong Kong's monetary and financial stability for more than three decades and has shown its resilience in multiple regional and global financial crises. Against the backdrop of social incidents

happening during the year, a number of unfounded rumours casting doubt on the LERS and financial stability of Hong Kong circulated in the social media. The HKMA acted promptly and vigorously to rebut the rumours and reassure the public through the use of both traditional and social media, reiterating that the LERS would remain in place and Hong Kong would not impose foreign exchange or capital controls. In addition, the HKMA issued a number of articles to help the public understand the LERS operation, the flow of funds and the interest rate outlook. These efforts were effective in maintaining public confidence in the LERS, as evidenced by the orderly functioning of the markets throughout the year. The Government is also firmly committed to the LERS. Public confidence in the Government's commitment and the use of the Hong Kong dollar as a means of payment and storage of value were further reinforced by the stability in the foreign exchange and money markets. In its 2019 Article IV consultation with Hong Kong, the International Monetary Fund reaffirmed its long-standing support for the LERS as an anchor of Hong Kong's financial stability, and commented that the LERS remained the appropriate exchange rate arrangement for Hong Kong underpinned by Hong Kong's transparent rules, ample fiscal and foreign reserves, strong financial regulation and supervision, a flexible economy, and a prudent fiscal framework.

A robust banking system is crucial to the normal functioning of the LERS. Hong Kong's banking system is highly liquid and sound, with liquidity positions and capitalisation being well above the minimum international standards. To ensure the resilience of the banking sector, the HKMA has been closely monitoring banks' management of credit, liquidity and interest rate risks and stress-test results, and has maintained its supervisory efforts on corporate, property-related and Mainland-related lending. With a smaller Aggregate Balance relative to previous years, banks have in general strengthened their liquidity management arrangements and have been more proactive in managing their day-to-day funding positions. Furthermore, the HKMA has maintained close dialogue with banks to ensure smooth recycling of liquidity in the market, especially ahead of and during the subscription periods of large IPOs. No settlement gridlocks were noted during the year, with the Discount Window continuing to function effectively and efficiently.

To improve the transparency of the Currency Board Account, a specific portion of Exchange Fund assets has been allocated to back the Monetary Base since October 1998. The Backing Ratio (defined as the Backing Assets divided by the Monetary Base) moved within a range of 109.9–112.1% during 2019, without touching the Upper or Lower Trigger Level. The ratio closed at 111.2% on 31 December (Chart 5). Under the LERS, 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. In the event of abrupt shocks, the sizeable amount of financial resources of the Exchange Fund, together with Hong Kong's robust banking system, will provide powerful support to Hong Kong's monetary and financial stability.

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Chart 5 Daily movement of the Backing Ratio in 2019



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Other activities

The Currency Board Sub-Committee (CBC) of the Exchange Fund Advisory Committee monitors and reviews issues relevant to monetary and financial stability in Hong Kong. In 2019, the CBC considered issues including an event study on the LERS operations, the relationship between the Aggregate Balance and interest rates in Hong Kong, an improved and more flexible approach to options markets' views about the LERS, and the impact of future IPOs on HIBORs. Records of the CBC's discussions on these issues and reports on Currency Board operations submitted to the CBC are published on the HKMA website.

Research

The Hong Kong Institute for Monetary and Financial Research (HKIMR), formerly the Hong Kong Institute for Monetary Research, pursues research studies on topics in monetary policy, banking and finance that are policy relevant. This is reflected in the wide array of topics explored by HKIMR researchers and overseas visitors and in its conferences and events. The HKIMR collaborates with major central banks and policy institutions to jointly organise policy-focused conferences. Its research visiting programmes support research projects on policy issues that are of importance to the HKMA, Hong Kong and the region.

In 2019, the HKIMR hosted 14 research scholars, published 17 working papers, and held 11 public seminars covering a broad range of economic, monetary and financial issues. It also organised three international conferences:

- ◆ The Tenth Annual International Conference on the Chinese Economy, titled "China's Financial Reforms and Economic Transformation", was held on 10–11 January in Hong Kong, organised jointly by the HKIMR, the Financial Research Institute of the People's Bank of China and the Research Institute of Finance of the Development Research Centre of the State Council. The conference provided a world-class forum for economic experts from central banks, international institutions, academia and the financial industry to discuss issues related to the risks that Mainland's financial sector faced in the light of changes introduced by financial reforms and Mainland's economic development.
- ◆ The Fourth International Finance and Macroeconomics Conference, titled "Open Economy Macroeconomics in the Age of Normalization", was organised on 12–13 April jointly by the HKIMR and the Hong Kong University of Science and Technology.
- ◆ The HKIMR and the Federal Reserve Bank of New York co-hosted a conference titled "Monetary Policy and Heterogeneity" in Hong Kong on 23–24 May, featuring a keynote speech by James Bullard, President and Chief Executive Officer of Federal Reserve Bank of St. Louis.

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Notes and coins



At the end of 2019, the total value of banknotes (notes issued by note-issuing banks) in circulation was HK\$516.6 billion, an increase of 6.8% from a year earlier (Charts 6, 7 and 8). The total value of government-issued notes and coins in circulation

amounted to HK\$12.8 billion, up 3.3% year-on-year (Charts 9 and 10). Among the government-issued notes and coins, the value of HK\$10 notes in circulation amounted to HK\$4.7 billion, 83% of which were polymer notes.

Chart 6 Banknotes in circulation by note-issuing banks at the end of 2019

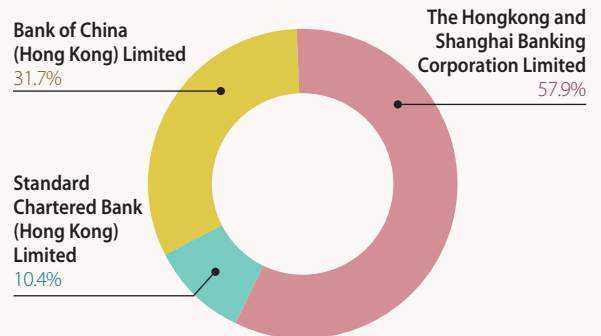
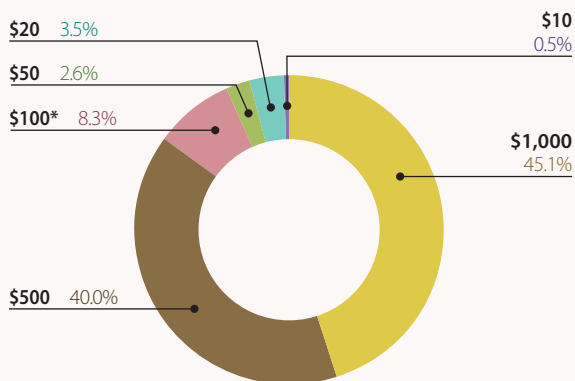


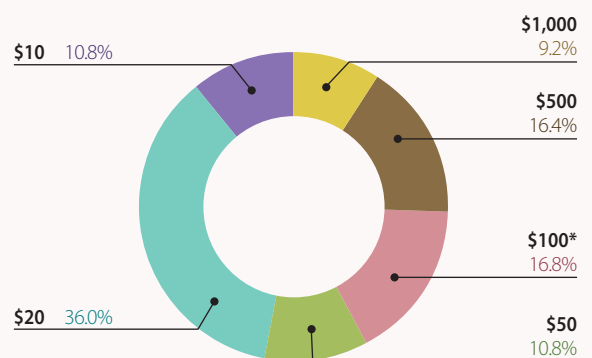
Chart 7 Distribution of banknotes in circulation at the end of 2019

HK\$

(By value)



(By number)



* Includes 0.1 percentage point contributed by HK\$150 banknote.

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Chart 8 Banknotes in circulation at the end of 2019

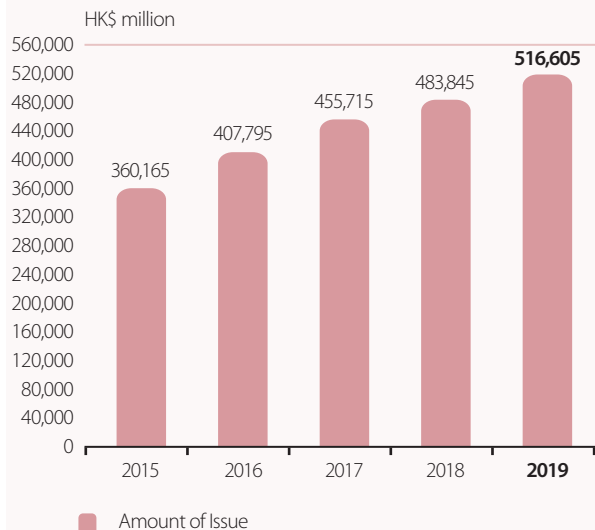


Chart 9 Government-issued notes and coins in circulation at the end of 2019

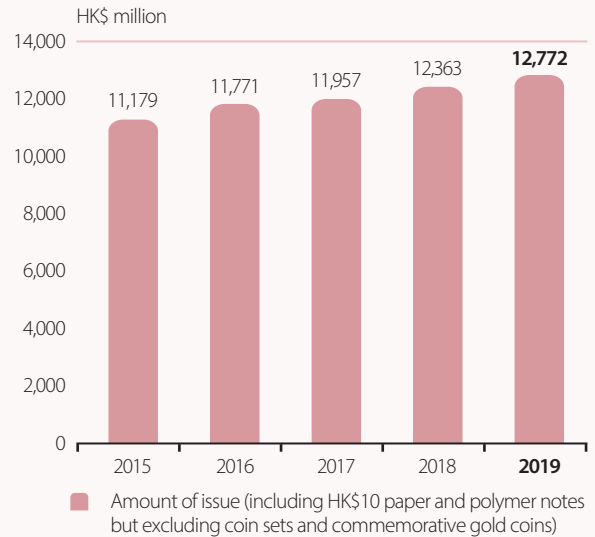
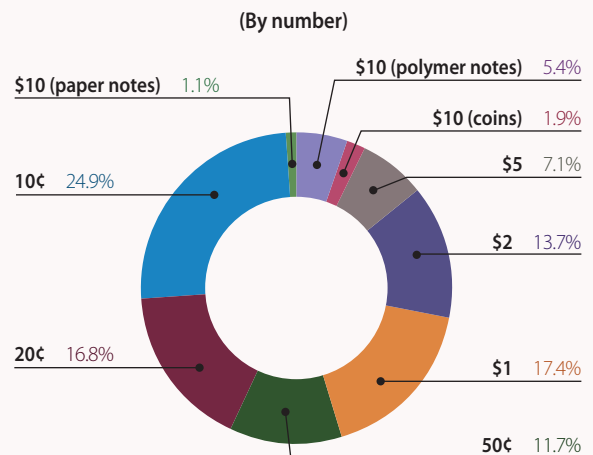
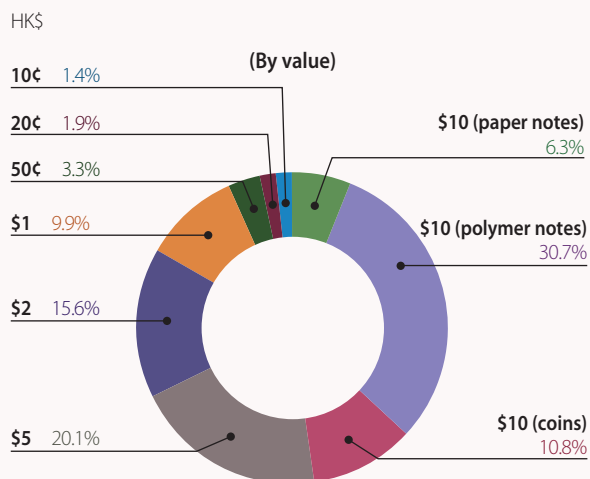


Chart 10 Breakdown of government-issued notes and coins in circulation at the end of 2019



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New series of Hong Kong banknotes

The HKMA and the three note-issuing banks announced in 2018 the issue of a new series of banknotes. The new HK\$1,000 banknotes entered circulation in late 2018, and the HK\$500 notes and HK\$100 notes during 2019. The remaining two denominations of HK\$50 and HK\$20 were released into circulation in early 2020.

During the year, the HKMA arranged a variety of publicity materials and events about the new banknotes, including a publicity video on their security features, a media event and an exhibition on the design of the HK\$100 notes at the Xiqu Centre of the West Kowloon Cultural District to elaborate on the theme of Cantonese opera adopted for the HK\$100 notes. Student ambassadors visited schools, elderly centres and visually impaired associations to provide talks for over 4,900 participants. Seventeen public seminars were held for over 2,400 bank tellers, retailers and students to promote awareness of the new banknotes.



HKMA's then Chief Executive, Mr Norman Chan (left), joins the chief executives of the three note-issuing banks to talk about the design of the new HK\$100 notes.



A talk on the 2018 series of banknotes for primary school students.

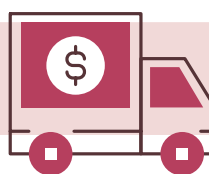
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Coin Collection Programme

The Coin Collection Programme, launched in October 2014, is well received by the public. It is the world's first structured coin collection programme, sending two mobile trucks, known as Coin Carts, to visit the public across all 18 districts of Hong Kong on a rotational basis. Each Coin Cart is equipped with two high-speed coin counting machines. The public may exchange their coins for banknotes, top up their stored value facilities such as Octopus cards and e-wallets, or donate the coins to the Community Chest box on board. In collaboration with the Hong Kong Council of Social Service, the Coin Carts collected coins on flag days for non-governmental organisations. The Coin Carts also visited schools to raise students' awareness of the programme.

Up to end-2019, the two Coin Carts had served about 685,000 people and collected 554 million coins with a total face value of HK\$802 million since inception. Details and up-to-date information about the programme, including the service schedule, are available on the HKMA website (coincollection.hkma.gov.hk).

The Coin Carts have collected **554 million** coins with a total face value of **HK\$802 million** since inception.



Exchange Fund Bills and Notes

The EFBN Programme continued to operate smoothly. At the end of 2019, the nominal amount of outstanding Exchange Fund papers stood at HK\$1,082.1 billion (Table 2).

Table 2 Outstanding issues of EFBNs

HK\$ million	2019	2018
Exchange Fund Bills (by original maturity)		
28 days	1,800	800
91 days	644,362	624,015
182 days	357,600	354,000
364 days	51,700	51,700
Sub-total	1,055,462	1,030,515
Exchange Fund Notes (by remaining tenor)		
1 year or below	6,400	10,400
Over 1 year and up to 3 years	8,600	8,000
Over 3 years and up to 5 years	5,600	5,000
Over 5 years and up to 10 years	6,000	7,600
Over 10 years	0	1,200
Sub-total	26,600	32,200
Total	1,082,062	1,062,715

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PLANS FOR 2020 AND BEYOND



The global macro-financial environment in 2020 is likely to be complicated by a host of risk factors, including negative sentiments over the novel coronavirus outbreak, the ebb and flow of negotiations in the US-China trade disputes, and

evolving geopolitical conflicts. While the challenging external environment may lead to higher volatility in the flow of funds, Hong Kong is able to withstand outflows without compromising the city's financial stability, given the ample foreign reserves and robust banking system. Social situations in Hong Kong and the coronavirus outbreak may continue to impact the domestic real economy. Nevertheless, with the resilience and buffers built up in Hong Kong's financial system over the years, the HKMA has the capability, resources and commitment to safeguard monetary and financial stability.

The HKMA will continue to monitor closely risks and vulnerabilities in the domestic and external environments, and stands ready to deploy appropriate measures where necessary to maintain Hong Kong's monetary and financial stability. For example, the HKMA will further develop the timely monitoring of positions in the over-the-counter derivatives market using Hong Kong Trade Repository data. A research programme in 2020 will study issues affecting the Hong Kong economy and assess the potential risks associated with them. The CBC 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 strengthen them.