Business Overview

Business Overview

Performance Highlights

The major achievements of the Group for the year included:

- purchasing about HK$316 million of loan assets
- helping homebuyers borrow a total of HK$32.3 billion in mortgage loans through the Mortgage Insurance Programme (**MIP**)
- approving 2,282 applications since the launch of the Reverse Mortgage Programme (**RMP**), with an average property value of around HK$5.1 million
- approving 11 applications since the launch of the Premium Loan Insurance Scheme (**PLIS**), with an average property value of around HK$3.9 million
- approving loans totalling HK$49.7 million under the Microfinance Scheme (**MFS**) since its inception and up to the end of 2017 to business starters, self-employed people from different backgrounds and professions, and those wanting to achieve self-improvement through education and training
- further extending the application period for the 80% guarantee product under the SME Financing Guarantee Scheme (**SFGS**) for one year to 28 February 2018 following the Financial Secretary's announcement in the 2017/18 Budget. Since the launch of the SFGS in January 2011 until the end of 2017, the Group had approved more than 13,100 applications for a total loan amount of HK$52.1 billion, of which more than 12,800 applications for loans amounting to HK$51.2 billion were approved with 80% guarantee protection. More than 7,800 local small and medium enterprises (**SMEs**) and nearly 202,800 related employees have benefited under the SFGS
- issuing HK$17.9 billion of debt securities (with maturity of one year and above) in a cost-effective manner, thus promoting the development of the local debt market and maintaining the Group's position as one of the most active issuers in Hong Kong
- safeguarding excellent credit quality, with over-90-day delinquency ratios of 0.003% for the mortgage insurance portfolio, 0.06% for the Hong Kong residential mortgage portfolio (industry average of 0.03%), 0.60% for the microfinance loan portfolio and 0.06% across all asset classes as at 31 December 2017
- maintaining the Group's long-term foreign and local currency ratings of AA+ by S&P Global Ratings (**S&P**) and Aa2 by Moody's Investors Service, Inc. (**Moody's**).

The Group maintained a solid financial position for 2017:

- profit attributable to shareholders of HK$806 million
- net interest margin of 1.1%
- return on assets of 1.6%
- return on shareholders' equity of 8.6%
- cost-to-income ratio of 26.8%
- capital adequacy ratio of 21.0%, which is well above the minimum requirement of 8% stipulated by the Financial Secretary.

Corporate Restructuring

Following the announcement by the Financial Secretary in the 2017–18 Budget that the Corporation had commenced a study on the design and feasibility of a public annuity scheme, the Corporation announced and confirmed the details of a Life Annuity Scheme (**LAS**) in the second quarter of 2017. The LAS was targeted for implementation by the middle of 2018, subject to the approval by the Insurance Authority (**IA**) and the progress on other preparatory tasks. To comply with the relevant authorization requirements of the IA, the Corporation started a corporate restructuring exercise and established two wholly-owned subsidiaries, the HKMC Insurance Limited (**HKMCI**) to take up the Corporation's existing general insurance business and the HKMC Annuity Limited (**HKMCA**) to operate the LAS.

HKMC Insurance Limited

Under the corporate restructuring exercise, the Corporation would transfer to the HKMCI all its existing general insurance business, including the MIP, RMP, PLIS and SFGS. The HKMCI obtained the formal authorization from the IA in February 2018 and the business transfer is scheduled to take effect on 1 May 2018.

HKMC Annuity Limited

The Group announced in June 2017 that the LAS would be launched by mid-2018. HKMCA, which is wholly owned by the Group, was established on 29 June 2017 to prepare for the implementation of the LAS.

The life expectancy of Hong Kong people is increasing and, coupled with the fact that, by 2040, one out of three Hong Kong citizens will be aged 65 or above, the availability for stable and sustainable retirement planning solutions is essential. In the local financial market, there are not many retirement products that can help the elderly derive a stable income stream for the rest of their lives and effectively insure against their longevity risk.

LAS will be an immediate lifetime guaranteed fixed-payout annuity. Given that most annuity products in the market are deferred annuity products that target the working population, the LAS aims to bridge the market gap by catering for the needs of the retirees segment. The eligible entry age of the Scheme starts at 65. Subject to prudent risk management and assessment, the target issue amount for the first tranche is HK$10 billion, with a per capita minimum premium amount at HK$50,000 and a cap at HK$1 million. Under the Scheme, annuitants will make a one-off premium payment and then immediately start to receive a fixed monthly payout for life. The LAS provides a lifelong stream of stable income to retirees and facilitates their retirement planning by providing absolute certainty on the future amount of cash flows.

HKMCA is working full steam ahead on the preparatory tasks for the launch of the LAS with a view to applying for the necessary authorisation from the IA by mid-2018. Meanwhile, in view of the foreseeable overwhelming demand for the LAS, HKMCA will solicit the participation of retail banks in establishing a wide distribution network to facilitate the sale of the product to elderly applicants. Further preparatory work will enhance public awareness of the nature and features of the product through a series of educational and promotional activities.

Market Overview

General Economic Conditions

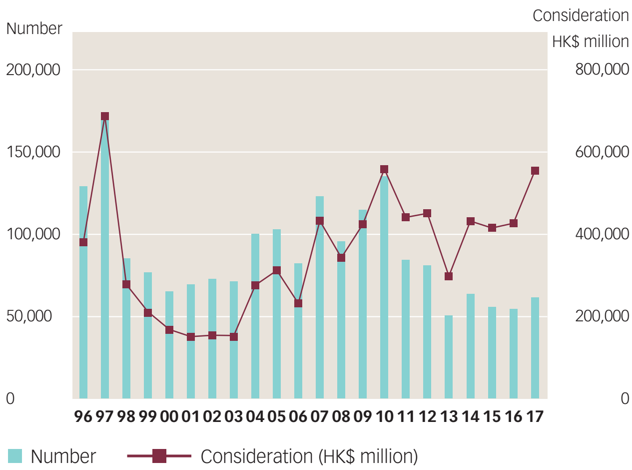
In 2017, global economic conditions improved with a synchronous upturn in global trade and production. Economic and political uncertainty in major advanced economies has also receded, along with easing concerns over the populist sentiment in the run-up to elections in Europe. Global monetary policies converged with the US Federal Reserve continuing to raise its interest rate and normalise its balance sheet, while the European Central Bank also planned to taper its quantitative easing programme. In the region, China's better-than-expected economic performance was underpinned by better export performance and a rebound in private investment growth. The Hong Kong economy benefitted from broad-based external growth and recorded above-trend expansion on solid domestic and external demands. Against this backdrop, the Hong Kong economy grew modestly during the year at 3.8% year-on-year in real terms.

Property Market

Hong Kong's property sentiment remained strong throughout 2017. Transaction volumes and prices surged to an interim peak in April from the start of the year. However, with the introduction of further prudential measures on property mortgage loans by the Hong Kong Monetary Authority (**HKMA**) in May, and an increase in the US interest rate by the Federal Reserve in June, the property market showed some signs of moderation in the second quarter. Transactions in the residential property market dropped by 50% in July as compared to April. A mild rebound in sales volume and considerations were recorded in the fourth quarter. Overall, the number of residential property transactions in 2017 increased by 12.6% year-on-year to 61,591, while the consideration of transactions gained a 30% year-on-year increment **(Figure 1)**.

Figure 1

Agreements for Sale and Purchase of Residential Building Units

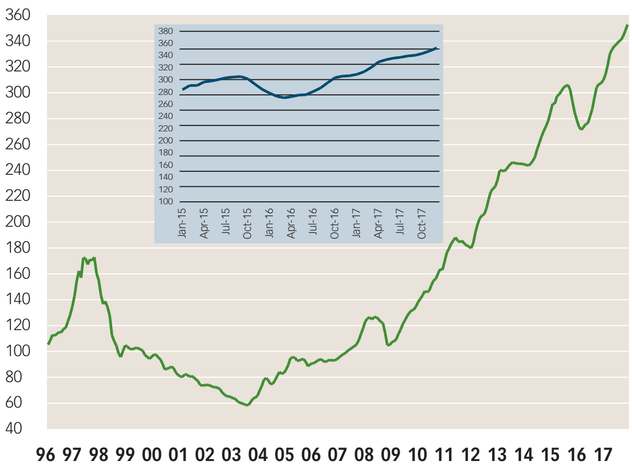


Source: Land Registry

The transaction volume in primary and secondary markets rose continuously throughout 2017. In general, residential property prices[1] recorded a 14.8% cumulative increase in 2017, compared with a 7.9% increase in 2016, and had surpassed the 1997 peak by 104% as at the end of 2017 **(Figure 2)**.

Figure 2

Private Domestic Price Index (1999 = 100)



Source: Rating and Valuation Department

[1] Source: The Private Domestic Price Index published by the Rating and Valuation Department

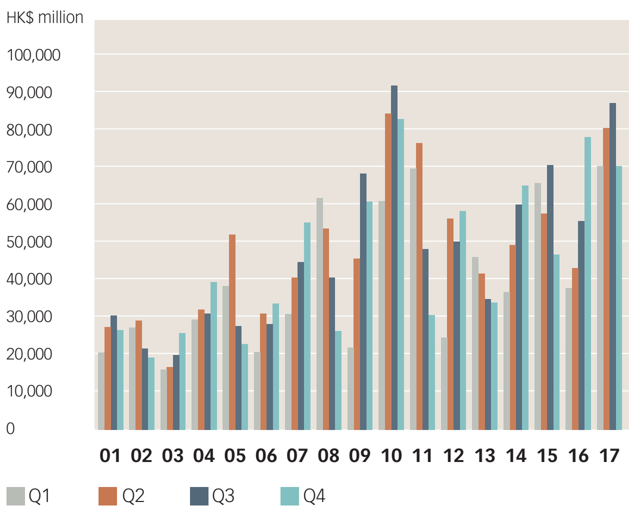
Mortgage Market

Overall, the mortgage rate in Hong Kong stayed low in 2017. The Best Lending Rates (**BLRs**) remained unchanged at 5% and 5.25% throughout the year. The Hong Kong Interbank Offered Rates (**HIBORs**) fluctuated in 2017. With reference to the HKMA Monthly Statistics Bulletin, the one-month HIBOR in terms of period average[2] was high at 0.68% in January, but started to drop and reached its lowest point in May at 0.37%. It increased from 0.41% in June and continuously rose to 1.11% in December.

During the year, mortgage lending recorded steady growth, with the total outstanding value of all residential mortgage loans rising moderately by 8.1% to HK$1,259.5 billion. The gross value of new loans drawn down[3] increased by 43.6% year-on-year in 2017, compared with the drop rate of 10.8% in 2016 **(Figure 3)**.

Figure 3

New Residential Mortgage Loans Drawn Down

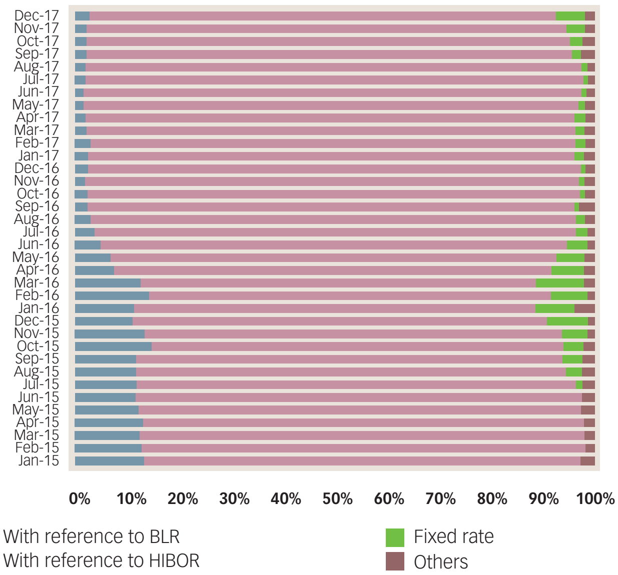


Source: Hong Kong Monetary Authority

While HIBOR remained at a low level for most months of the year, HIBOR-based mortgages turned out to be more receptive to borrowers. 89.8% of new mortgage loans were priced with reference to HIBOR in December 2017. The proportion of BLR-based mortgages remained low throughout the year, ranging between 1.6% and 3% **(Figure 4)**. The share of fixed-rate mortgage loans increased but remained low, accounting for 5.5% of new mortgage loans as at December 2017.

Figure 4

Pricing of New Residential Mortgage Loans Approved



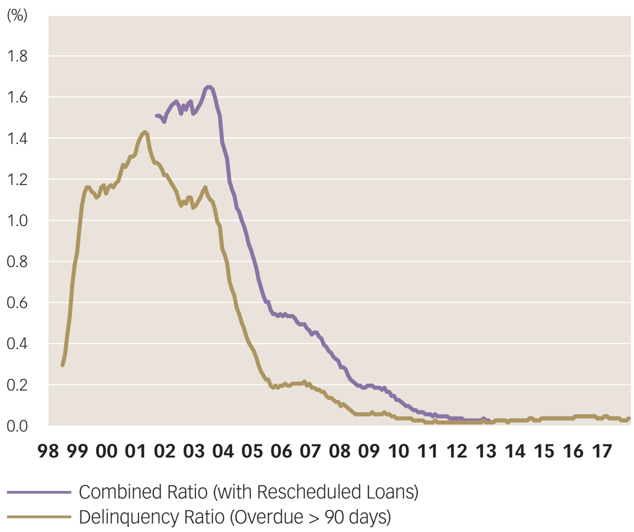
Source: Hong Kong Monetary Authority

[2] Source: HKMA Monthly Statistical Bulletin
[3] Source: HKMA's Monthly Residential Mortgage Survey (**HKMA Survey**)

Under a stable labour market and the HKMA's prudent supervision of the mortgage lending sector, the asset quality of residential mortgage loans remained excellent in 2017. The over-90-day delinquency ratio of mortgage loans stayed between 0.02% and 0.04% throughout the year, reflecting banks' prudent underwriting standards. The combined ratio, which takes into account both delinquent and rescheduled loans, also remained low, in the range of 0.02%–0.04%, during the same period **(Figure 5)**. As residential property prices had been on a continuous rise in 2017, no residential mortgage loan in negative equity was recorded as at end-December 2017[4].

Figure 5

Delinquency Ratio of Residential Mortgage Loans



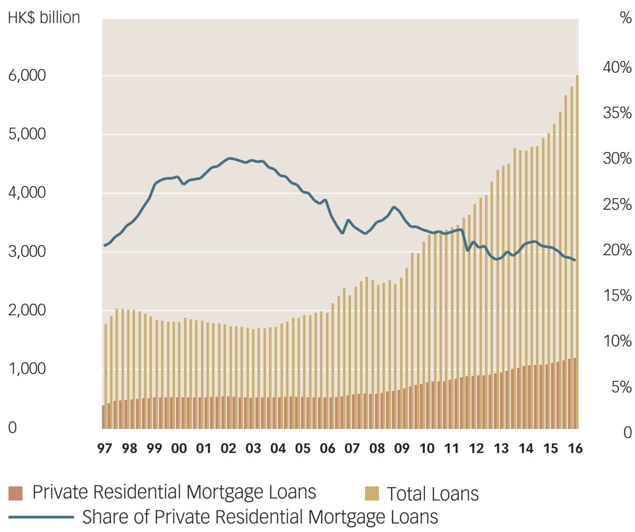
Source: Hong Kong Monetary Authority

Banking-Sector Exposure

The total outstanding value of mortgage loans for private residential properties increased to HK$1,208.2 billion at the end of 2017 (end-2016: HK$1,122.3 billion), accounting for one-fifth of total loans in Hong Kong **(Figure 6)**. Adding to this lending for building and construction, along with property development and investment, the value of property-related loans totalled HK$2,678.3 billion, representing about 41% of banks' total loan books. The outstanding value of mortgage loans for the purchase of flats in the Home Ownership Scheme, Private Sector Participation Scheme and Tenants Purchase Scheme increased to HK$51.3 billion by the end of 2017 (end-2016: HK$43 billion).

Figure 6

Total Loans and Private Residential Mortgage Loans of All Authorized Institutions



Source: Hong Kong Monetary Authority

4 Source: HKMA Survey

Asset Acquisition

While the ample liquidity in the market has led to weak incentives for banks to offload their assets, the Group is prepared to provide liquidity to the market as and when required. In 2017, the Group acquired about HK$316 million of assets, which included residential mortgage loans and other assets.

Extension of the time-limited 80% guarantee product under the SME Financing Guarantee Scheme (80% SFGS)

As part of the package of support measures announced in the 2012–13 Budget for local SMEs to tide them over in the uncertain global economic environment, the Group promulgated the time-limited special concessionary measures under the market-based SFGS, providing 80% guarantee on eligible loan facilities at a substantially lowered guarantee fee rate (**80% SFGS**). Backed by the Government's total guarantee commitment of up to HK$100 billion, the 80% SFGS helps SMEs obtain loans for general working capital or buying equipment or assets to support business operations. The Group administers the 80% SFGS on prudent commercial principles. The guarantee fees are set aside to pay default claims from participating lenders and out-of-pocket expenses to be incurred under the arrangement. A total of 30 Authorized Institutions (**AIs**) have participated in the SFGS as lenders.

In light of the uncertain external economic environment and trade performance, the application period of the 80% SFGS was extended for five years to the end of February 2018. In addition, in a bid to alleviate the financing burden of borrowers, the guarantee fee rates for the 80% SFGS were reduced by 10%, and the minimum annual guarantee fee rate of 0.5% was removed with effect from 1 June 2016.

Further to the SFGS communication campaign started in the second quarter of 2016, the Group continues to communicate closely with participating lenders, SME associations and chambers of commerce and industry. It shares success stories of SMEs to enhance understanding and promote public awareness of the 80% SFGS.

The Group has taken on board valuable feedback collected during the communication campaign. It rolled out additional refinements in 2017 with a view to facilitating a smooth transition for refinancing of loans upon the expiry of the five-year guarantee period, expediting SFGS claim process and providing flexibility for reimbursement of recovery expenses.

During the year, the Group arranged regular training and workshops for lenders' staff members and shared business and claim statistics with lenders to enhance transparency and promote more active use of the 80% SFGS. The Group introduced the SFGS in seminars for SMEs and participated as an exhibitor in the SmartBiz Expo organised by the Hong Kong Trade Development Council in December 2017 to increase public awareness.

The SFGS has been well received by the market. As at 31 December 2017, the Group had approved more than 13,100 applications for a total loan amount of HK$52.1 billion under the SFGS. More than 12,800 applications for loans amounting to HK$51.2 billion were approved under the 80% SFGS. More than 7,800 local SMEs and nearly 202,800 related employees have benefited under the SFGS.

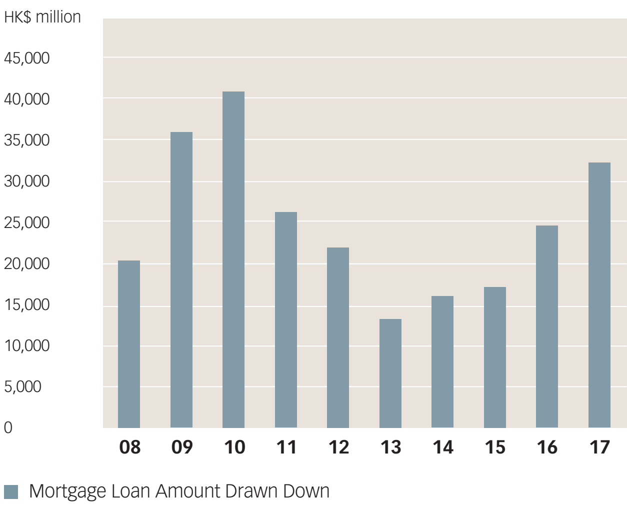
Mortgage Insurance Programme

The Mortgage Insurance Programme helps potential homebuyers struggling to come up with a substantial down payment for the purchase of a property. From a banking industry perspective, the MIP allows banks to engage in higher loan-to-value lending without incurring additional credit risk and jeopardising the stability of the banking system. The MIP creates a win-win situation for both homebuyers and banks.

Over the years, the MIP has firmly established itself as an integral part of mortgage financing in Hong Kong. Demand for the MIP continued to increase in 2017, and the volume of loans drawn down under the MIP increased to HK$32.3 billion in 2017 from HK$24.6 billion in 2016 **(Figure 7)**. About 86% of the MIP loans drawn (in terms of loan amount) were secured on properties in the secondary market. This demonstrates the importance of the MIP to homebuyers in the secondary market.

Figure 7

Mortgage Loan Amount Drawn Down under HKMC MIP



Source: Hong Kong Mortgage Corporation Limited

During the year, the Group joined with participating banks to promote the MIP through various promotional channels. Since 1999, the MIP has helped more than 133,000 families achieve the dream of home ownership, with an aggregate loan drawdown of HK$335 billion.

Premium Loan Insurance Scheme

As commissioned by the Financial Secretary in the 2015–16 Budget, the Group launched the Premium Loan Insurance Scheme in September 2015. It provides a platform for owners of subsidised housing properties aged 50 or above to finance their land premium payments to the Hong Kong Housing Authority (**HA**), Hong Kong Housing Society (**HS**) or the Government.

Under the PLIS, borrowers are granted loans by banks against their subsidised housing properties as security, primarily for settling premium payments to the HA, HS or the Government. The Group acts as an insurer by assuring participating banks that losses arising from the possible shortfall at the time of selling the property will be covered when the loan is terminated. By the end of 2017, the Group had approved 11 PLIS applications since its inception, with an average appraised property value of around HK$3.9 million and an average lump-sum payout amount of HK$0.85 million for settlement of premium payments.

PLIS promotions were conducted through various channels. Television and radio commercials were broadcasted on major broadcasting channels and at bank branches. The Group also jointly promoted PLIS with its business counterparties, including public seminars arranged by banks. This was supported by distribution of marketing materials to communicate product features to potential customers.

To reach out to the community, the Group put forward down-to-earth promotions in a joint collaborative effort with the RMP. In particular, a series of 19-day roving exhibitions were held at shopping centres close to subsidised housing. These targeted flat owners with land premium not yet settled. The exhibitions consisted of marketing materials and informative exhibits for the study of RMP and PLIS. Games were played on the spot to enrich customer experience and deepen understanding of the two products.

Reverse Mortgage Programme

The Reverse Mortgage Programme was launched to give elderly people an additional financial planning option to enhance their quality of life. By the end of 2017, the Group had approved 2,282 RMP applications since its inception, with an average property value of around HK$5.1 million and an average monthly payout amount of HK$15,000.

Subsequent to the success of the 2016 publicity campaign for the extension of the RMP to cover subsidised sale flats with unpaid premium, the Group continued to promote the RMP at full blast. Thanks to the intensive and multi-faceted publicity campaign, 2017 marked a fruitful year for the RMP. A significant growth in the number of RMP drawdown cases was recorded, with an increment of 92% compared to 2016.

Understanding that a widespread and penetrative network is crucial to drawing potential customers, the Group has been working closely with banks and successfully expanded the distribution network by inviting a new bank to participate as referral agent. In 2017, the Group participated in 15 public seminars organised by banks to introduce the RMP and the response was overwhelmingly good. An average attendance of 100 participants was recorded for each seminar, with some reaching up to 250 attendees. Many audience members showed keen interest and good understanding of the RMP and how it would enhance the quality of their retirement. Apart from banks, the Group was also invited to speak at educational seminars arranged by non-governmental organisations (**NGOs**), professional bodies, universities and government departments to deepen the understanding of RMP across different sectors.

To reach out to the community, the Group staged district-level promotions across Hong Kong. Five sessions of roving exhibitions were conducted in high traffic districts of Hong Kong Island, Kowloon and the New Territories. The exhibitions, which were open to the public for a total of 19 days, and in a joint promotional effort with the PLIS, consisted of a display area that demonstrated the product features and a games booth where interactive games were held to deepen public understanding of the RMP. The Group's staff and bank representatives were available on site to promote the RMP and address public enquiries. Response to the roving exhibitions has been positive and encouraging. Crowds were seen assembling and enquiring about the RMP and there were long queues to play the games.

Advertising initiatives prevailed on multiple channels throughout the year to appeal to the wider public. RMP commercials were broadcasted on major television and radio channels, online media platforms, such as YouTube, and at bank branches. In conjunction with its all-round marketing strategy, the Group's management has strongly supported RMP development. This was shown by its proactive engagement of different stakeholders in the community and participation in high-level publicity expeditions hosted by professional organisations, during which the Group CEO shared his insights into retirement planning with participating industry fellows and the public.

Over the years, the Group has maintained close relations with the media. Notably, media interviews and briefings were regularly arranged. When retirement planning became a hot topic among the public, the RMP, which is considered an integral part of retirement planning solutions, was frequently mentioned in newspapers and across various media channels with reasonably sound and positive remarks.

Microfinance Scheme

Under the Microfinance Scheme, the Group continued to take on the role of a scheme operator. It liaised with participating banks and NGOs to offer loans at an affordable rate and support services to people wanting to start their own business, become self-employed or achieve self-enhancement through training, upgrading of skills or obtaining professional certification.

To support the Hong Kong Food Truck Pilot Scheme (**Food Truck Scheme**) introduced by the Government in March 2016, the Group collaborated with the Tourism Commission to render support. This included loan financing, mentorship and entrepreneurial training to Food Truck Scheme applicants. By the end of December 2017, two applications had been approved.

The MFS has been operating smoothly since its launch in June 2012. By the end of 2017, the MFS had approved a total of 200 loans with a total loan amount of HK$49.7 million.

The MFS has a good mix of borrowers from different backgrounds and professions, such as young beauticians, make-up artists, a pet grooming award winner and fashion and watch designers. There are IT graduates, Chinese medicine practitioners, rehabilitated offenders, a clown performance entertainer, native English speaking teachers, dessert and pastry chefs, a testing laboratory specialist, a food truck operator of the Food Truck Scheme, a podiatrist and university undergraduates.

Marketing initiatives were continued in 2017 to promote the MFS among the youth and entrepreneurial community. The Group participated in three career fairs organised by universities. In each session, a booth was allotted to the Group that consisted of exhibits displaying MFS features. Representatives were available to introduce and answer enquiries on the MFS.

The Group was also invited to speak at public seminars hosted by NGOs and educational institutions to introduce the MFS to the target community. Besides youth and the entrepreneurial community, the Group promoted the MFS to the mass public via advertising. An MFS commercial was broadcasted on the major television channels and via online platforms, such as YouTube, in the first half of 2017. The Group sponsored the participating NGOs to organise promotional activities and sponsored other NGOs' entrepreneurial-related training courses to promote the MFS.

Funding

The global financial market environment was benign in 2017 on the back of a synchronous global economic upturn and easing concern over economic and political outlooks in major economies. However, the global economy remained subject to numerous uncertainties, including the global growth momentum, the effect of monetary policy normalisation by the US Federal Reserve and possibly other major central banks, as well as heightened geopolitical tensions. Despite the challenging market conditions, the Group managed to secure prudent pre-funding for loan purchases and refinancing activities. Given the Group's strong background as a wholly government-owned entity and its solid credit rating, the Group raised debt totalling HK$17.9 billion (with maturity of one year and above) in 2017. At the end of the year, the Group's total outstanding debt amounted to HK$34.8 billion.

The Group is committed to developing the local debt market through regular debt issuances and the introduction of new debt products. As one of the most active bond issuers in Hong Kong, the Group will continue to issue debt in both local institutional and retail markets, and diversify its funding sources and investor base to overseas institutional markets. This will not only help broaden the Group's funding base, but also provide institutional and retail investors with high quality debt instruments to satisfy their need for portfolio diversification and yield enhancement.

The Group has three debt issuance programmes that allow the issuance of debt securities in an efficient and effective manner. With its strong credit rating, the Group's debt issues are well received by the investment community, such as pension funds, insurance companies, investment funds, charities, government-related funds and retail investors. The Group regularly undertakes proactive investor communications to meet and update investors.

Medium Term Note Programme

The Group established the multi-currency Medium Term Note (**MTN**) Programme in June 2007 to broaden its investor base and funding sources in the international market. It was set up with an initial size of US$3 billion, which was increased to US$6 billion in July 2011 to meet growing demand from overseas investors. The multi-currency feature of the programme enables the Group to issue notes in major currencies, including Hong Kong dollars, US dollars, renminbi, Australian dollars, British pounds, euro and Japanese yen, to meet demand from both local and overseas investors. All foreign currency-denominated MTN debt is fully hedged into either US dollars or Hong Kong dollars. The programme incorporates flexible product features and offering mechanisms for public issuances and private placements to increase its appeal to investors with different investment horizons and requirements. As at the end of 2017, an extensive dealer group comprising 10 major international and regional financial institutions had been appointed to support future MTN issuance and provide secondary market liquidity.

In 2017, the Group launched 35 MTN private debt issues, totalling an equivalent of HK$17.9 billion (with maturity of one year and above).

Debt Issuance Programme

The Debt Issuance Programme (**DIP**) was established in July 1998 to target institutional investors in the Hong Kong dollar debt market. It was set up with an initial programme size of HK$20 billion, which was increased to HK$40 billion in 2003. The DIP has since provided a flexible and efficient platform for the Group to issue debt and transferable loan certificates with a tenor of up to 15 years. A total of six primary dealers and 16 selling group members have been appointed under the DIP to provide wide distribution channels for both public and private debt issues.

Retail Bond Issuance Programme

The Group is dedicated to promoting the local retail bond market. The Group pioneered a new offering mechanism for the retail bond market in Hong Kong in November 2001 and established the HK$20 Billion Retail Bond Issuance Programme in May 2004. Under this programme, placing banks use their retail branch networks, telephone and electronic banking facilities to place debt securities issued by the Group with retail investors. To ensure the liquidity of the aforementioned retail bonds, the placing banks are committed to making firm bid prices for the bonds in the secondary market. Since 2001, the Group has issued retail bonds totalling HK$13.7 billion. When the market environment is conducive, the Group aims to regularly issue retail bonds to provide an additional investment tool for Hong Kong's retail investors.

Revolving Credit Facility Provided by the Exchange Fund

In January 1998, during the Asian Financial Crisis, the Exchange Fund extended a HK$10 billion Revolving Credit Facility to the Group through the HKMA. This Facility enables the Group to maintain smooth operations under exceptional circumstances so it can better fulfil its mandate to promote banking and financial stability in Hong Kong. While the Group obtains long-term funding from local and international debt markets to fund its operations, the Facility also gives the Group a liquidity fallback. Following the global financial crisis in 2008, the size of the Facility was increased to HK$30 billion in December 2008, demonstrating the HKSAR Government's recognition of the importance of, and further support for, the Group.

The Group used the Revolving Credit Facility during times of market stress in 1998 and 2008 to partially fund the acquisition of Hong Kong residential mortgage assets from local banks. At both times, the Revolving Credit Facility was fully repaid with funds raised from the Group's cost-effective debt issuance when the markets stabilised. In 2017, there were no drawdowns under the Revolving Credit Facility.

Credit Rating

The Group's ability to attract investment in its debt securities is underpinned by its strong credit rating, equivalent to that of the HKSAR Government, according to S&P and Moody's.

Credit Ratings of the Group

	S&P		Moody's	
	Short-term	Long-term	Short-term	Long-term
Local Currency	A-1+	AA+ (Stable)	P-1	Aa2 (Stable)
Foreign Currency	A-1+	AA+ (Stable)	P-1	Aa2 (Stable)

The credit rating agencies have made very positive comments on the Group's credit standing.

The following comments are extracts from the credit rating reports of S&P and Moody's in June 2017 and November 2017 respectively:

S&P
"We equalise our ratings on HKMC with the ratings on Hong Kong, the corporation's sole ultimate owner. This reflects our view of an almost certain likelihood of timely and sufficient extraordinary support from the Hong Kong government in the event that HKMC needs it … We consider HKMC's undertaking of additional policy initiatives over the past several years as having a mild solidifying effect on its ties with the Hong Kong government, and reinforcing the integral link between the two entities."

"In our view, HKMC's unique and well-established market position and its strong management and governance underpin its strong business position. HKMC is unique in its role to purchasing mortgage and loan portfolios, especially in times of stress, to address local Hong Kong banks' liquidity and balance-sheet management needs … A variety of stressful market conditions have tested HKMC's business model. For example, when global financial markets and the local economy were under stress in late 2008 and early 2009, HKMC enlarged its mortgage acquisitions in response to banks' requests, and enhanced its mortgage insurance program; although in more recent years, it tightened the eligibility criteria for its mortgage insurance program in response to elevated property prices."

"We believe that HKMC manages market risks effectively. The company maintains a simple asset and liability structure, with mainly vanilla products managed within what we regard as sound market risk policies. The corporation's exposure to market risk is principally to interest rate movements, with exposure to interest rate mismatches appearing to be well managed."

"We expect HKMC to continue to prudently manage its funding and liquidity. We assess the company's funding profile as adequate, considering its lack of retail funding … We expect HKMC to maintain a healthy buffer of highly liquid assets, which is more than sufficient to cover its short-term funding needs … Further, a HK$30 billion revolving credit facility more than adequately covers all liabilities of HKMC maturing within the next year and provides a significant cushion against any unexpected liquidity stress."

Moody's
"HKMC is fully owned by the government through the Exchange Fund. The company carries out policy mandates, which include promoting financial and banking stability in Hong Kong, home ownership, the development of the local debt capital market, and the development of retirement planning solutions through the purchase of Hong Kong mortgages from commercial banks and the provision of mortgage insurance and reverse mortgages. As part of its mandate to promote banking stability, the company acts as an alternative lender of last resort by standing ready to purchase residential mortgages from banks during times of stress."

"The government provides the HKMC with a HK$30 billion revolving credit facility and additional equity capital when needed. If the company's credit profile is weakened in a stress scenario, we expect the government to provide timely extraordinary support."

"The HKMC has maintained very sound asset-quality metrics since its establishment… Hong Kong residential mortgages have historically performed very well through economic cycles. Even when property prices fell by up to 70% between 1997 and 2003, the company's overall mortgage delinquencies never exceeded 2%. The current average LTV ratio on the company's Hong Kong mortgages is below 40%."

"As a wholesale-funded entity with no customer deposits, the HKMC relies on ongoing access to the debt capital market to fund its operations. Nevertheless, the company has a policy of pre-funding its expected asset purchases and maintains a very strong liquidity profile during normal economic conditions. The company has very good access to capital markets owing to its strong financial fundamentals and government affiliation … The company had sufficient liquid assets, including the government revolving credit facility, to repay all of its outstanding debts as of end of June 2017."

Mortgage-Backed Securitisation

The Group strives to promote the development of the mortgage-backed securities (**MBS**) market in Hong Kong. MBS is an effective financial instrument that can channel long-term funding from the debt market to supplement the need for long-term financing generated by mortgage loans. Banks and financial institutions can make use of MBS to manage risks inherent in mortgage loans, such as credit risks, liquidity risks, interest rate risks and asset-liability maturity mismatch risks. A deep and liquid MBS market can help enhance the development of an efficient secondary mortgage market and further promote Hong Kong as an international financial centre.

The Group has issued a total of HK$13.2 billion MBS since 1999. The US$3 billion Bauhinia Mortgage-Backed Securitisation Programme was established in 2001 to provide a convenient, flexible and cost-efficient platform for the Group to issue MBS with various product structures, credit enhancements and distribution methods.

Risk Management

The Corporation operates under prudent commercial principles. The principle of "prudence before profitability" guides the design of the overall risk management framework and disciplines its uses in day-to-day business execution. Over the years, the Corporation has continuously made refinements to its well-established, robust and time-tested risk management framework to reflect changes in the markets and its business strategies.

Corporate Risk Management Committee

The Board is the highest decision-making authority of the Corporation and holds the ultimate responsibility for risk management. The Board, with the assistance of the Corporate Risk Management Committee (**CRC**), has the primary responsibility for formulating risk management strategies in the risk appetite statement and for ensuring that the Corporation has an effective risk management system to implement these strategies. The risk appetite statement defines the constraints for all risk-taking activities and these constraints are incorporated into risk limits, risk policies and control procedures that the Corporation follows to ensure risks are properly managed.

The CRC is responsible for overseeing the Corporation's various types of risks, reviewing and approving high-level risk-related policies, overseeing their implementation, and monitoring improvement efforts in governance, policies and tools. Regular stress tests are reviewed by the CRC to evaluate the Corporation's financial capability to weather extreme stress scenarios.

The CRC is chaired by an Executive Director, with members including the Chief Executive Officer, Senior Vice President (Operations), Senior Vice President (Finance), General Counsel, Senior Vice President (Risk) and senior staff from the Risk Management Department.

The major types of risk the Corporation manages are credit risk, market risk, operational risk, legal and compliance risk, leveraging risk, longevity risk and property risk.

Credit Risk

Credit risk is the Corporation's primary risk exposure. It represents the default risk presented by loan borrowers and counterparties.

(a) *Default risk*

To effectively address default risk, the Corporation adopts a four-pronged approach to safeguard and maintain the quality of its assets, MIP and SME guarantee portfolios:

- careful selection of Approved Sellers, Servicers, Reinsurers and Lenders
- prudent eligibility criteria for asset purchase, insurance and guarantee application
- effective due diligence processes for mortgage purchase, default loss, insurance and guarantee claims
- enhanced protection for higher-risk transactions.

Losses may arise if there are shortfalls in the recovery amount received for defaulted loans that fall under the Mortgage Purchase Programme (**MPP**). To mitigate this default risk, the Corporation establishes prudent loan purchasing criteria and conducts effective due diligence reviews as part of the loan purchase process to maintain the credit quality of loans. In addition, depending on the projected risk exposure of each underlying loan portfolio, credit enhancement arrangements are agreed upon with Approved Sellers on a deal-by-deal basis to reduce credit losses that could arise from the borrower's default.

Losses may also arise from default on loans under the MIP's insurance coverage. Each MIP application is underwritten by the Corporation in accordance with a set of eligibility criteria and each claim from a participating bank is reviewed by the Corporation to ensure the fulfilment of all MIP coverage conditions. As a result, the default risk for loans with MIP coverage has been greatly reduced. To reduce the risk of possible concentration of this default risk, the Corporation transfers a portion of the risk-in-force to Approved Reinsurers through reinsurance arrangements.

Similarly, losses may arise from a borrower's default on loans in the SME guarantee portfolio. The borrower's default risk of each guarantee application is assessed by the lender in accordance with their credit policies. In addition, the Corporation adopts prudent eligibility criteria, conducts administrative vetting and credit reviews to better understand the credit quality of the applications, and carries out a due diligence review on each default claim to ensure the loan's compliance with the Corporation's eligibility criteria and the lenders' internal credit policies.

In addition, the Corporation adopts a three-pronged approach to manage the default risk under the MFS, which includes: (a) prudent assessment of borrowers' repayment capability; (b) a vetting panel to consider business viability and approval of the loan applications; and (c) provision of training and mentoring support to borrowers.

Credit performances of the loan and guarantee portfolios are tracked and reported on a regular basis to provide management with an updated credit profile to closely monitor the operating environment for any emerging risks to the Corporation, and timely implement risk mitigating measures.

(b) *Seller/Servicer counterparty risk*

Counterparty risks may arise from the failure of a Seller/Servicer of an acquired portfolio to remit scheduled payments to the Corporation in a timely and accurate manner.

The Approved Sellers/Servicers are subject to a risk-based eligibility review and ongoing monitoring on their loan servicing quality and credit standing.

(c) *Reinsurer counterparty risk*

Reinsurer counterparty risk refers to the failure of an Approved Reinsurer to make claim payments to the Corporation. To effectively mitigate reinsurer counterparty risk, the Corporation has established a framework for the assessment of mortgage reinsurers' eligibility.

The Corporation performs annual and ad-hoc reviews of each Approved Reinsurer to determine the eligibility for ongoing business allocation and risk-sharing portions.

(d) *Treasury counterparty risk*

Treasury counterparty risk arises when there is a delay or failure from treasury counterparties to make payments with respect to treasury instruments transacted with the Corporation. Treasury counterparties are managed by a ratings-based counterparty assessment framework and a risk-based counterparty limit mechanism. The treasury counterparties are continually monitored and the counterparty limits are adjusted based on the assessment results.

Furthermore, the Corporation has set up bilateral collateral arrangements with major swap counterparties to mitigate treasury counterparty risk.

(e) *Lender risk*

The Corporation is exposed to lender risk in SME lending that arises from: (a) a lender's underwriting being non-compliant with its credit policy; (b) a lender's loosely formulated credit policy that is not specific enough or sufficiently defined for compliance; and (c) the moral hazard of a lender being less prudent in underwriting a guarantee-protected application. The Corporation manages lender risk through the review of the lenders' credit policies and the due diligence reviews on claims.

At the heart of the Corporation's credit risk management framework are two committees: the Credit Committee and the Transaction Approval Committee.

Credit Committee

The Credit Committee (**CC**) is responsible for setting the Corporation's overall credit policies and eligibility criteria, particularly for asset acquisition, mortgage insurance, SME guarantee business and MFS. The CC operates under a framework approved by the Board. The CC is the approval authority for accepting applications to become Approved Sellers/Servicers under the MPP, Approved Reinsurers under the MIP, Approved Lenders under the SFGS and eligible treasury counterparties. It is also responsible for setting risk exposure limits for counterparties. The CC also closely monitors the operating environment and puts in place timely risk mitigating measures to manage the credit risk.

Transaction Approval Committee

The Transaction Approval Committee (**TAC**) conducts an in-depth analysis of pricing economics and associated credit risks for business transactions, while taking into consideration the latest market conditions and business strategies approved by the Board. Major transactions endorsed by the TAC are subject to approval by an Executive Director.

The CC and TAC are both chaired by the Chief Executive Officer, with members including Senior Vice President (Operations), Senior Vice President (Finance), General Counsel, Senior Vice President (Risk) and senior staff from the relevant functional departments.

Market Risk

Market risk arises when the Corporation's income or the value of its portfolios decreases due to adverse movements in market prices. Market risk consists of interest rate risk, asset-liability maturity mismatch risk, liquidity risk and currency risk.

(a) *Interest rate risk*

Net interest income is the predominant source of earnings for the Corporation. It represents the excess of interest income (from the Corporation's loan portfolio, cash and debt investments) over interest expenses (from debt issuance and other borrowings). Interest rate risk arises when changes in market interest rates affect the interest income associated with the assets and/or interest expenses associated with the liabilities.

The primary objective of interest rate risk management is to limit the potential adverse effects of interest rate movements on interest income/expense, while maintaining stable earnings growth. The interest rate risk faced by the Corporation is two-fold, namely interest rate mismatch risk and basis risk. Interest rate mismatch risk is the most substantial risk affecting the Corporation's net interest income. It arises mainly as a result of the differences in the timing of interest rate re-pricing for the Corporation's interest-earning assets and interest-bearing liabilities. Interest rate mismatch risk is most evident in the loan portfolios where the majority of the loans are floating-rate assets (benchmarked against the Prime Rate or HIBOR Rate), while the majority of the Corporation's liabilities are fixed-rate debt securities. The Corporation makes prudent use of a range of financial instruments, such as interest rate swaps, interest rate swaptions, basis swaps, forward rate agreements and issuances of MBS, to manage interest rate mismatch risk. The proceeds of the fixed-rate debt securities are generally swapped into HIBOR-based funds via interest rate swaps to better match the floating-rate incomes from mortgage assets.

The Corporation also uses duration gap as an indicator to monitor, measure and manage interest rate mismatch risk. Duration gap measures the difference in interest rate re-pricing intervals between assets and liabilities. The wider the duration gap, the higher the interest rate mismatch risk. A positive duration gap means the duration of assets is longer than that of the liabilities and, therefore, represents greater risk exposure to rising interest rates. A negative duration gap, in contrast, indicates greater risk exposure to declining interest rates.

Depending on the prevailing interest rate outlook and market conditions, the Corporation proactively re-balances the duration gap of its asset-liability portfolio under the guidance and supervision of the Asset and Liability Committee (**ALCO**).

Basis risk represents the difference in the benchmark rates between the Corporation's Prime-based interest-earning assets and its HIBOR-based interest-bearing liabilities. However, there are only limited financial instruments available in the market to fully hedge the Prime-HIBOR basis risk. In general, basis risk can be effectively addressed only when assets are based on HIBOR to match the funding base, or when related risk management instruments become more prevalent or economical. Over the past few years, the Corporation has consciously adopted a strategy that acquires more HIBOR-based assets. As a result, the Prime-HIBOR basis risk for the Corporation has been substantially reduced. In addition, the Corporation had issued Prime-based MBS and used hedging derivatives to mitigate such basis risk.

(b) Asset-liability maturity mismatch risk

The actual average life of a portfolio of mortgage loans, which is usually shorter than their contractual maturity, depends on the speed of scheduled mortgage repayments and unscheduled prepayments. Higher prepayment rates shorten the average life of a portfolio of mortgage loans. In Hong Kong, prepayment occurs for two main reasons: (i) housing turnover: borrowers repaying their mortgage loans upon the sales of the underlying properties, and (ii) refinancing: borrowers refinancing their mortgage loans to obtain lower mortgage rates.

Asset-liability maturity mismatch risk can be more specifically characterised as reinvestment risk and refinancing risk. Reinvestment risk refers to the risk of a lower return from the reinvestment of proceeds that the Corporation receives from prepayments and repayments of its loan portfolio. Refinancing risk is the risk of refinancing liabilities at a higher level of interest rate or credit spread. The Corporation is exposed to refinancing risk (in funding amount and cost of funds) when it uses short-term liabilities to finance long-term, floating-rate loan portfolios. Reinvestment risk is managed through the ongoing purchase of loans to replenish the rundown in the retained portfolios and through the investment of surplus cash in debt securities or cash deposits to fine-tune the average life of the overall asset pool. In addition, the Corporation uses the issuance of callable bonds and transferable loan certificates to mitigate reinvestment risk. The call option embedded in callable bonds and transferable loan certificates allows the Corporation to adjust the average life of its liabilities to match more closely with that of the overall pool of assets.

The Corporation manages its refinancing risk through flexible debt securities issuance with a broad spectrum of maturities. This serves to adjust the average life of the overall liability portfolio in a dynamic fashion. In addition, refinancing risk can be mitigated by adjusting the maturities of assets in the investment portfolio, or off-loading mortgage assets through securitisation of mortgage loans into MBS. The Corporation uses the asset-liability maturity gap ratio to measure, monitor and manage asset-liability maturity mismatch risk to ensure a proper balance between the average life of the Corporation's assets and liabilities.

(c) *Liquidity risk*

Liquidity risk represents the risk of the Corporation not being able to repay its obligations, such as the redemption of maturing debt, or to fund the committed purchases of loan portfolios. The Corporation implements its liquidity risk management framework in response to changes in market conditions. The Corporation continuously monitors the impact of market events on its liquidity position, and has pursued a prudent pre-funding strategy to help contain the impact of any global financial turmoil on its liquidity. Liquidity risk is managed by monitoring the daily inflow and outflow of funds, and by projecting the longer-term inflows and outflows of funds across the full maturity spectrum. The Corporation uses the liquid asset ratio to measure, monitor and manage liquidity risk.

Given its strong background as a wholly government-owned entity and solid credit rating, the Corporation is efficient in raising funds from debt markets with both institutional and retail funding bases. This advantage is supplemented by the Corporation's portfolio of highly liquid investments, which is held to enable a swift and smooth response to unforeseen liquidity requirements. The HK$30 billion Revolving Credit Facility from the Exchange Fund further provides the Corporation with a liquidity fallback even if exceptional market strains last for a prolonged period.

The Corporation manages pre-funding prudently through well-diversified funding sources, so all foreseeable funding commitments are met when they fall due. This supports the growth of its business and the maintenance of a well-balanced liability portfolio. Such diversification allows the Corporation to pursue a pre-funding strategy at the lowest possible cost, while offering safeguards against the difficulty to raise funds in distorted market conditions. The current funding sources are illustrated in **Table 1** below:

Table 1: Current Funding Sources for the Corporation

Funding Source	Description
US$6 billion Medium Term Note Programme	There are 10 Dealers who underwrite and distribute local and foreign currency debt to international institutional investors under the programme
HK$40 billion Debt Issuance Programme	There are 6 Primary Dealers and 16 Selling Corporation Members who underwrite and distribute debt to institutional investors under the DIP. The Transferable Loan Certificate Sub-Programme under the DIP provides further diversification of its funding sources and broadening of its investor base
HK$20 billion Retail Bond Issuance Programme	This debt issuance programme has 19 Placing Banks which assist in offering retail bonds to investors
US$3 billion Bauhinia Mortgage-Backed Securitisation Programme	With a total of 8 Dealers, this multicurrency, mortgage-backed securitisation programme permits the Corporation to originate MBS in both the local and international markets
Investment Portfolio	This portfolio comprises mainly cash and bank deposits, commercial paper, high-quality certificates of deposit, and notes that are readily convertible into cash
Money Market Lines	The Corporation has procured money market lines from a large number of local and international banks for short-term financing
HK$30 billion Revolving Credit Facility	The Exchange Fund commits to providing the Corporation with HK$30 billion in revolving credit

(d) *Currency risk*

Currency risk arises from the impact of foreign exchange rate fluctuations on the Corporation's financial position and foreign currency-denominated cash flows. The Corporation manages its currency risk strictly in accordance with the investment guidelines approved by the Board and under the supervision of the ALCO, which sets daily monitoring limits on currency exposure.

In accordance with this prudent risk-management principle, the net exposure of the foreign currency-denominated debts issued under the MTN Programme is fully hedged by the use of cross-currency swaps.

Transaction execution is segregated among the front, middle and back offices to ensure adequate checks and balances. The Treasury Department, acting as the front office, is responsible for monitoring financial market movements and executing transactions in the cash, derivatives, debt and securitisation markets, in accordance with the strategies laid down by the ALCO. The Risk Management Department, assuming the middle-office role, monitors compliance with treasury counterparty and market risk limits. The Operations Department, acting as the back office, is responsible for deal verification, confirmation, settlement and the payment process.

Asset and Liability Committee

The ALCO is responsible for the overall management of market risk of the Corporation. It follows the prudent risk management principles and investment guidelines approved by the Board. It is responsible for reviewing and managing the Corporation's market risk, including interest rate risk, asset-liability maturity mismatch risk, liquidity and funding risk, and currency risk. Regular meetings are held to review the latest financial market developments and formulate relevant asset-liability management strategies for the Corporation.

The ALCO is chaired by the Chief Executive Officer, with members including Senior Vice President (Finance), Senior Vice President (Operations), Senior Vice President (Risk) and senior staff from the relevant functional departments.

Operational Risk

Operational risk represents the risk of losses arising from inadequacies, or the failure of internal processes, people or systems, or external interruptions.

The Corporation adopts a bottom-up approach to identify operational risk by conducting in-depth analyses of new products, business activities, processes, system enhancements and due diligence reviews of new operational flows. Comprehensive validation rules, management information system reports and audit trails are in place to track and report any errors or deficiencies.

The Corporation actively manages operational risk with its comprehensive system of well-established internal controls, authentication structures and operational procedures. The operational infrastructure is well designed to support the launch of new products in different business areas. Rigorous reviews are conducted before the implementation of operational or system infrastructure to ensure adequate internal controls are in place to mitigate operational risks.

To ensure an efficient and effective discharge of daily operations, the Corporation pursues advanced technological solutions alongside robust business logistics and controls to carry out its operational activities and business processes. Steps have been taken to ensure the accuracy, availability and security of these systems. The Corporation has also taken cautious steps to institute adequate checks and balances to ensure its operations are properly controlled. Effective internal controls help minimise financial risk and safeguard assets against inappropriate use or loss, including the prevention and detection of fraud.

Information System Security Policy

The Corporation's Information System Security Policy documents the requirements of security standards and establishes controls over the confidentiality, integrity and availability of information assets for observance by all staff. The Corporation implements various information security measures to minimise its exposure to external attacks. Internally, the Corporation has also implemented security controls on its Local Area Network to reduce damage in the event of a malicious intrusion. The Corporation engages external consultants when appropriate to conduct intrusion vulnerability tests to enhance system security. To ensure a high degree of compliance, the Corporation's mission-critical systems and processes are subject to regular review by internal auditors.

Business Continuity Plan

The Corporation's business recovery plan ensures maximum possible service levels are maintained at all units to support business continuity and minimise the impact of business disruption from different disaster scenarios. Each business unit regularly assesses the impact of disaster scenarios and updates recovery procedures. To ensure business recovery procedures are practical, an annual corporate-wide business continuity drill is conducted. Daily back-ups and offsite storage of back-up tapes are in place to protect the Corporation from IT disasters.

Product Sign-off Mechanism

To ensure all risk factors are considered when designing and implementing a new product, the Corporation has developed a product development management framework, under which proper sign-off of product specification is conducted prior to the launch of any new product. The product driver is clearly assigned at the start of the product development process and is responsible for instituting the sign-off process. Products can only be launched after all functional departments have signed off and confirmed functional readiness.

Complaint-handling Mechanism

The Corporation makes a continuous effort to improve its core processes to ensure its products and services meet customers' expectations. To make sure customers' feedback is timely and properly attended to, the Corporation has a formal complaint-handling mechanism to track, report and handle complaints.

Operational Risk Committee

The Operational Risk Committee (**ORC**) is responsible for ensuring all line functions in the Corporation maintain an effective operational risk and internal control framework. The ORC establishes key risk indicators to track the key operational risk items and monitor the effectiveness of the risk mitigating measures. Operational risk incidents that may potentially indicate a control weakness, a failure or non-compliance in internal processes are logged, reported and handled for operational risk management. The ORC is also responsible for providing directions and resolving issues related to policies, controls and management of operational issues as well as ensuring prompt and appropriate corrective actions in response to audit findings related to operational risks or internal controls.

The ORC is chaired by the Chief Executive Officer, with members including Senior Vice President (Operations), Senior Vice President (Finance), General Counsel, Senior Vice President (Risk) and senior staff from the relevant functional departments.

Legal and Compliance Risks

Legal risk arises from uncertainty in the application or interpretation of laws and regulations, and any unenforceability or ineffectiveness of legal documents in safeguarding the interests of the Group. Compliance risk arises from the failure to comply with laws, regulations, codes of practice and industry practices applicable to the Group.

The Legal Office, headed by the General Counsel, advises the Group on legal matters with a view to controlling legal risk. When new products or business activities are considered, the Legal Office will advise on the relevant laws and the regulatory environment. It will also advise on the necessary legal documentation, and identify possible legal pitfalls with a view to protecting the interests of the Group. Where appropriate, external counsel will be engaged to assist the Legal Office to provide legal support to the Group. The Legal Office works closely with other departments in the Group to advise on legal issues and documentation.

The Compliance Function is part of the Legal Office and is led by the Chief Compliance Officer, who reports to the Chief Executive Officer through the General Counsel. Where appropriate, the Compliance Function will engage external counsel to advise on compliance matters. For a more detailed description of the Compliance Function and its work, please refer to the Compliance Reporting Section of the Corporate Governance Report.

The ORC is the governance committee for legal and compliance risks.

Leveraging Risk

To ensure the Corporation would not incur excessive risk when expanding its business and balance sheet in proportion to its capital base, the Financial Secretary, in his capacity as the Financial Secretary and not the shareholder, acted as the regulator of the Corporation, by issuing a set of guidelines with reference principally to the Basel II risk-based capital adequacy framework and the Guidelines on Capital Adequacy Ratio (**CAR**), with the minimum CAR set at 8%. As at 31 December 2017, the Corporation's CAR was 21.0%.

The prudent use of regulatory capital is monitored closely in accordance with the capital guidelines. The Chief Executive Officer reports the CAR and the daily minimum ratio to the Board of Directors on a quarterly basis. An early warning system is also in place. If the CAR drops to the threshold level of 14%, the Chief Executive Officer will alert the Executive Directors. If the CAR falls to 12% or below, the Board of Directors will be informed and appropriate remedial actions will be taken.

Longevity Risk

Longevity risk refers to the heightening risk of larger payouts under the RMP and PLIS. The longer the payout and loan period, the larger the loan balance will accrue over time, and the less buffer there will be from the sale of the property to cover the outstanding loan balance. A loss may arise if there is a shortfall in the recovery amount after the disposal of the property. The termination rate of the loans depends largely on the mortality rate (i.e. life expectancy) of the borrowers.

Annual risk analysis is conducted to assess the potential financial impact of longevity risk, as well as the interaction among the various risk factors under the RMP and PLIS. The mortality assumptions are reviewed on a regular basis by the TAC.

Property Risk

Property risk arises from fluctuation in the value of property that acts as collateral for the Corporation's loan and guarantee portfolios under the MPP, MIP, RMP and PLIS. The Corporation manages property risk by conducting external property valuations for each loan purchase or application, setting prudent assumptions in the recoverable value of the collateralised property, restricting maximum loan-to-value ratios of the loans under the relevant programmes and conducting stress tests to examine the impact of adverse market conditions.

Process Management and Information Technology

Since its inception, the Group has devoted substantial resources and effort to continuously improve its business operations, strengthen its internal controls and enhance its application systems. The past year is no exception.

To further strengthen the Group's processes and systems, in respect of information security and data protection, the Group appointed a leading consulting firm with expertise in the area to assess the cybersecurity controls and strengthen relevant policies. Recommendations from the assessment are being implemented accordingly.

The Group continued to improve process automation, data integrity, system resilience and information security through systems development and enhancements to support various corporate and business initiatives, such as the SFGS, RMP, PLIS, MFS, MIP and treasury operations, and strengthen risk management. Such steps are vital to ensure efficiency, accuracy and robustness in business operations that translate into better services to the community. For example, we implemented payment automation solutions to improve customer payout processing for certain mortgage products.

In addition, our system enhancements and process re-engineering measures aim to achieve paperless operations that help contribute to a better and greener environment.

Corporate Social Responsibility

In recognition of the Corporation's contribution to the community and its commitment to corporate social responsibility (**CSR**), the Corporation has been awarded the Caring Organisation Logo by the Hong Kong Council of Social Service since 2008 and has now stepped into its 10th year of CSR participation. In appreciation of employers who place high value on their employees' retirement needs, the Corporation has received the Good MPF Employer Award from the Mandatory Provident Fund Schemes Authority since 2014.

As a socially responsible organisation, the Group cares for its employees and the community. The Group has underlined its commitment to CSR by caring for its employees' well-being, participating in charity activities and implementing environmental protection measures.

Care for Employees

Staffing and Remuneration

The Group attracts and grooms talent to ensure the efficient performance of its core missions of enhancing stability in the banking sector, promoting wider home ownership and facilitating development of the debt securities market. Employees are provided with competitive remuneration packages and fringe benefits, a promising career path and development opportunities, and a healthy and safe working environment. The Group has also adopted family-friendly practices by offering a five-day week to help employees maintain a good work-life balance, as well as comprehensive medical and dental insurance plans that cover both employees and their family members.

Through system automation and process re-engineering, the Group has maintained a lean and efficient workforce, despite an increase in the scope of operations and the complexity of the products it offers. In 2017, the permanent staff establishment of the Group was 261, and the staff turnover rate was 8.85%.

Training and Development

The Group recognises the importance of ongoing training and has devoted considerable resources to the continuous enhancement of its employees' professional knowledge and skills. In 2017, the Group arranged programmes and workshops to help employees enhance their product knowledge and strengthen their managerial and technical competence and soft skills.

The in-house training workshops covered a wide range of topics, such as problem solving, English business writing, team collaboration, management, and occupational safety and health. During the year, seminars on Anti-Discrimination and Anti-Money Laundering were also held.

Training on Problem Solving

Training on English Business Writing

Team Building Training

Work-life Balance Week

Training on Occupational Safety and Health

Dress Casual Day

The Group also sponsored employees for external job-related training and development courses covering a wide range of topics from mortgage-related issues, risk management, corporate governance, finance and accounting to information technology and leadership training.

In addition, all new employees were provided with an induction session to provide them with a foundation of knowledge about the Group's organisational structure, functions and policies.

Employee Relations and Staff Activities

To promote a healthy work-life balance and foster a family-friendly working environment, the Group's Staff Club regularly organises activities to cultivate better relationships and communication among employees. In 2017, these activities included interest classes, Work-Life Balance Week, outings and other staff gatherings, all of which were well received by employees and their families. The in-house staff publication *HKMConnection* recaps snapshots of the Group's staff activities.

Hiking from Mui Wo to Discovery Bay

To facilitate effective communication within the Group, the intranet Staff Homepage is frequently updated so useful information can be shared among different departments. There is also the Staff Suggestion Scheme, which encourages staff to suggest improvements in work flow and the workplace.

Health and Safety
As a caring organisation, the Group is dedicated to looking after employees' physical and mental health. An Employee Support Programme is in place to provide confidential external counselling services to employees and their family members, if needed. A vaccination programme for the prevention of influenza and health-check programmes at privileged rates were also offered to employees.

The Group has, from time to time, reviewed and strengthened its contingency plans, which aim to minimise any unexpected or sudden disruption to business operations, such as from an outbreak of communicable disease among employees. Periodic drills are organised to ensure employees are conversant with the activation of back-up facilities, contingency plans and communication arrangements in case of emergency.

Care for the Community

Charities and Social Activities
The Group promotes various charitable and community functions, such as fundraising events, donation campaigns and voluntary services. Employees are encouraged to support charity activities and join voluntary work organised by the Group's Volunteers Team, Caring League.

In 2017, the Group organised donation campaigns, such as Dress Casual Day 2017 for the Community Chest, and held its annual Blood Donation Day event for the Hong Kong Red Cross.

Employees have been keen to participate in voluntary services, demonstrating their concern for the needy by dedicating time and effort to various causes. The Caring League has partnered with several social service organisations to participate in a number of voluntary services, including the following:

- care for the environment: a recycling campaign in partnership with The Salvation Army to collect books, stationery and toys

- care for the elderly: organised by the HOPE Worldwide and Hong Kong Playground Association, involving our volunteers visiting elderly people, and bringing them "lucky bags" with daily necessities to welcome the Chinese New Year and Mid-Autumn Festival

- care for the children: organised by the Hong Kong Playground Association, involving our volunteers having an outing with children from low income families.

Internship and Manager Trainee Programmes
To help nurture talent for the future, the Group offers internship programmes for undergraduates to give them a taste of the real business world and help them better prepare for their future careers. The students who joined the programmes appreciated the learning experience and work opportunities they were exposed to.

During the year, the Group has continued the Manager Trainee Programme with the objective of identifying high-calibre young executives for grooming to meet the Group's long-term staff development plan. Throughout the three-year programme, the Manager Trainees will undergo on-the-job training in different departments, take part in corporate projects and attend structured learning and development programmes.

Environmental Protection
The Group continuously supports and implements various green measures to create a more environmentally friendly office and raise employees' awareness of methods of waste reduction and energy conservation. Employees are encouraged to adopt paperless working practices by using more electronic communication. They are also encouraged to collect waste paper and used toner cartridges for recycling. Since 2006, the Group has adopted various measures, including better control of office temperature and the use of LED lighting, in the interest of energy efficiency. The Group welcomes suggestions from employees on green office ideas and encourages its suppliers to use and offer more environmentally friendly products whenever possible.