



恒生銀行  
HANG SENG BANK

# Annual Report 2016

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## 2016 年年報

The printed version of Hang Seng Bank's Annual Report 2016  
will replace this version in late March 2017.

恒生銀行2016年年報之印刷本將於2017年3月下旬取代此版本。

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\* Where possible, percentages in this section have been rounded to the nearest percentage point to facilitate easy reading. Percentage-based indicators remain at 1 or 2 decimal places as appropriate.

The abbreviations 'HK\$m' and 'HK\$bn' represent millions and billions of Hong Kong dollars respectively.

## **CORPORATE PROFILE**

Founded in 1933, Hang Seng is one of Hong Kong's largest listed companies. Our market capitalisation as at 31 December 2016 was HK\$275.9 billion.

With around 10,000 employees, we serve over half the adult residents of Hong Kong – more than 3 million people – through about 260 service outlets. We also maintain branches in Macau and Singapore and a representative office in Taipei.

Established in 2007 and headquartered in Shanghai, our wholly owned mainland China subsidiary Hang Seng Bank (China) Limited operates a network with outlets in Beijing, Shanghai, Guangzhou, Shenzhen, Fuzhou, Nanjing, Dongguan, Hangzhou, Ningbo, Tianjin, Kunming, Xiamen, Chengdu, Jinan, Foshan, Zhongshan, Huizhou, Zhuhai, Jiangmen and Shantou.

Hang Seng is a principal member of the HSBC Group, one of the world's largest banking and financial services organisations.

## RATINGS

<b>Moody's</b>		
<b>Hang Seng Bank</b>	Long-term Bank Deposit (local and foreign currency)	Aa2
	Short-term Bank Deposit (local and foreign currency)	Prime-1
	Outlook	Negative
<b>Hang Seng China</b>	Long-term Bank Deposit (local and foreign currency)	A2
	Short-term Bank Deposit (local and foreign currency)	Prime-1
	Outlook	Negative

<b>Standard &amp; Poor's</b>		
<b>Hang Seng Bank</b>	Long-term Counterparty Credit (local and foreign currency)	AA-
	Short-term Counterparty Credit (local and foreign currency)	A-1+
	Outlook	Stable
<b>Hang Seng China</b>	Long-term Counterparty Credit (local and foreign currency)	AA-
	Short-term Counterparty Credit (local and foreign currency)	A-1+
	Outlook	Negative

## RESULTS IN BRIEF

	2016	2015	Change %
<b>For the year</b>			
	<b>HK\$m</b>	HK\$m	
Operating profit excluding loan impairment charges	<b>20,347</b>	20,547	(1)
Operating profit	<b>19,034</b>	19,439	(2)
Profit before tax <sup>1</sup>	<b>19,090</b>	30,488	(37)
Profit attributable to shareholders <sup>1</sup>	<b>16,212</b>	27,494	(41)
	%	%	
Return on average ordinary shareholders' equity <sup>1</sup>	<b>12.1</b>	20.7	
Cost efficiency ratio	<b>33.5</b>	33.8	
Average liquidity coverage ratio (quarter ended 31 Dec)	<b>253.6</b>	195.0	
Average liquidity coverage ratio (quarter ended 30 Sep)	<b>284.0</b>	237.2	
Average liquidity coverage ratio (quarter ended 30 Jun)	<b>257.1</b>	221.6	
Average liquidity coverage ratio (quarter ended 31 Mar)	<b>257.1</b>	167.4	
	<b>HK\$</b>	HK\$	%
Earnings per share <sup>1</sup>	<b>8.30</b>	14.22	(42)
Dividends per share			
- 1 <sup>st</sup> to 4 <sup>th</sup> interim dividends	<b>6.10</b>	5.70	7
- special interim dividend	-	3.00	N/A
<b>At year-end</b>	<b>At 31 December 2016</b>	At 31 December 2015	Change
	<b>HK\$m</b>	HK\$m	%
Shareholders' equity	<b>140,626</b>	141,981	(1)
Total assets	<b>1,377,242</b>	1,334,429	3
	%	%	
Capital ratios under Basel III			
- Common Equity Tier 1 ("CET1") Capital Ratio	<b>16.6</b>	17.7	
- Tier 1 Capital Ratio	<b>17.9</b>	19.1	
- Total Capital Ratio	<b>20.8</b>	22.1	

### <sup>1</sup> Partial disposal of shareholding in Industrial Bank Co., Ltd. ("Industrial Bank") in 2015

Reported results for 2015 include a gain on partial disposal of the ordinary shares of Industrial Bank of HK\$10,636m. Figures quoted as "excluding the gain on partial disposal of Industrial Bank" have been adjusted for the above item. Excluding the gain on partial disposal of Industrial Bank, key financial results and performance metrics are set out below for comparison purpose:

	2016	2015
Profit before tax (HK\$m)	<b>19,090</b>	19,852
Profit attributable to shareholders (HK\$m)	<b>16,212</b>	16,858
Return on average ordinary shareholders' equity (%)	<b>12.1</b>	12.6
Earnings per share (HK\$)	<b>8.30</b>	8.66

## FIVE-YEAR FINANCIAL SUMMARY

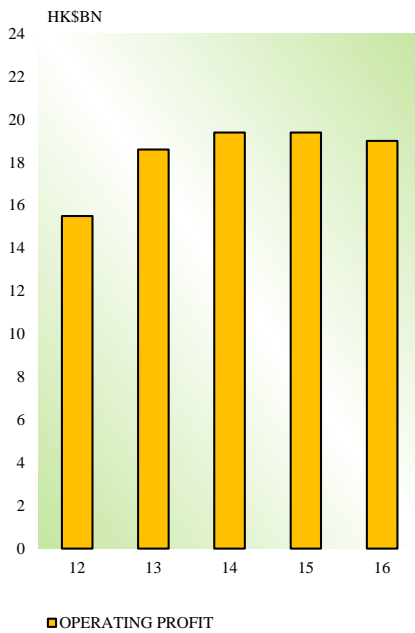
	2012 (restated)	2013	2014	2015	2016
<b>For the year</b>	HK\$bn	HK\$bn	HK\$bn	HK\$bn	HK\$bn
Operating profit	15.5	18.6	19.4	19.4	19.0
Profit before tax <sup>1</sup>	22.0	28.5	18.0	30.5	19.1
Profit attributable to shareholders <sup>1</sup>	19.3	26.7	15.1	27.5	16.2
<b>At year-end</b>	HK\$bn	HK\$bn	HK\$bn	HK\$bn	HK\$bn
Shareholders' equity	92.3	107.8	139.2	142.0	140.6
Issued and paid up capital	9.6	9.6	9.7	9.7	9.7
Total assets	1,077.1	1,143.7	1,264.0	1,334.4	1,377.2
Total liabilities	984.8	1,035.9	1,124.8	1,192.4	1,236.6
<b>Per share</b>	HK\$	HK\$	HK\$	HK\$	HK\$
Earnings per share <sup>1</sup>	10.11	13.95	7.91	14.22	8.30
Dividends per share					
- 1 <sup>st</sup> to 4 <sup>th</sup> interim dividends	5.30	5.50	5.60	5.70	6.10
- special interim dividend	-	-	-	3.00	-
<b>Ratios</b>	%	%	%	%	%
Return on average ordinary shareholders' equity <sup>1</sup>	22.8	25.4	13.4	20.7	12.1
Post-tax return on average total assets	1.9	2.4	1.3	2.1	1.2
Capital ratios under Basel III					
- Common Equity Tier 1 ("CET1") Capital Ratio	-	13.8	15.6	17.7	16.6
- Tier 1 Capital Ratio	-	13.8	15.6	19.1	17.9
- Total Capital Ratio	-	15.8	15.7	22.1	20.8
Capital ratios under Basel II					
- Core capital ratio	12.2	-	-	-	-
- Capital adequacy ratio	14.0	-	-	-	-
Cost efficiency ratio	34.9	32.4	31.8	33.8	33.5

### <sup>1</sup> Partial disposal of shareholding in Industrial Bank Co., Ltd. ("Industrial Bank") in 2015

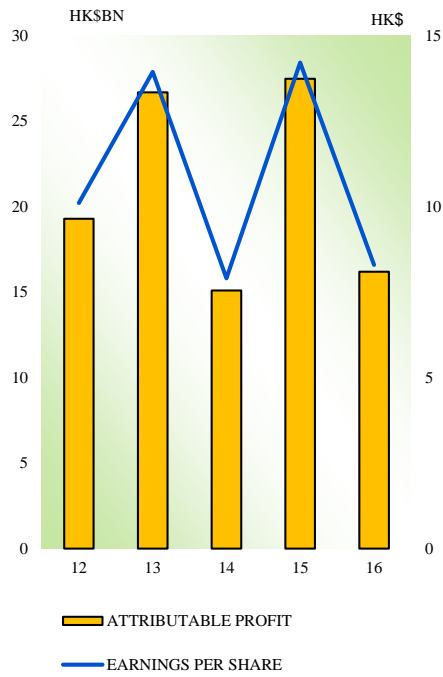
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	2016	2015
Profit before tax (HK\$bn)	19.1	19.9
Profit attributable to shareholders (HK\$bn)	16.2	16.9
Return on average ordinary shareholders' equity (%)	12.1	12.6
Earnings per share (HK\$)	8.30	8.66

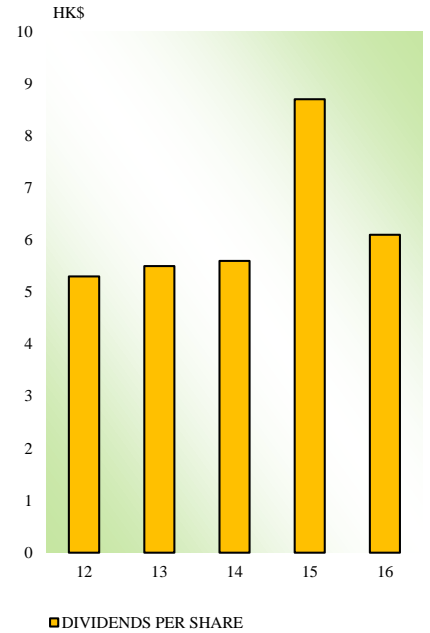
## RESULTS



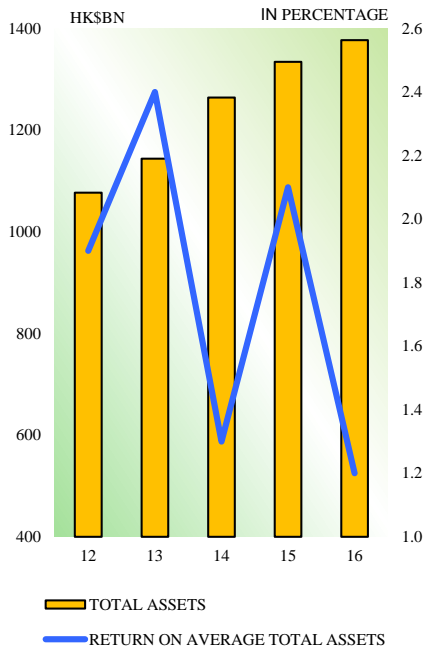
## ATTRIBUTABLE PROFIT AND EARNINGS PER SHARE



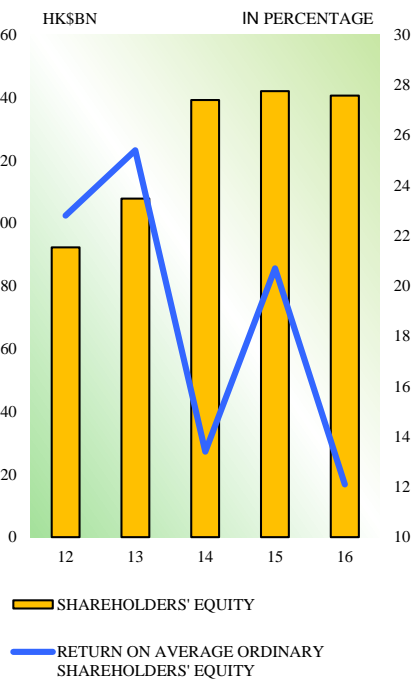
## DIVIDENDS PER SHARE



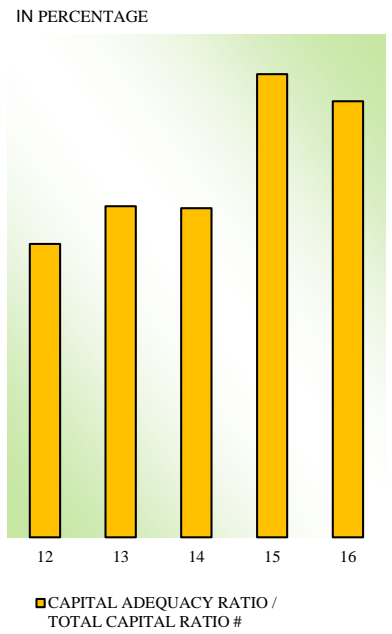
## TOTAL ASSETS AND RETURN ON AVERAGE TOTAL ASSETS



## SHAREHOLDERS' EQUITY AND RETURN ON AVERAGE ORDINARY SHAREHOLDERS' EQUITY



## CAPITAL ADEQUACY RATIO / TOTAL CAPITAL RATIO



# On 1 January 2013, the Hong Kong Monetary Authority ("HKMA") implemented the first phase of the Basel III capital framework in Hong Kong. The capital disclosures effective from 2013 under Basel III are, therefore, not directly comparable with the disclosure prepared under Basel II basis before.

## CHAIRMAN'S STATEMENT

International uncertainties and economic deleveraging on the Mainland continued to present challenging operating conditions. Investor caution resulted in subdued investment market activity and soft demand for loans during the year.

Against this backdrop, Hang Seng Bank leveraged its competitive strengths to record respectable results for 2016 and strengthen its platform for achieving long-term growth.

Excluding the impact of the HK\$10.6bn gain on the partial disposal of our holding in Industrial Bank in the first half of 2015, profit attributable to shareholders fell by 4% to HK\$16,212m and earnings per share declined by 4% to HK\$8.30. On a reported basis, attributable profit and earnings per share were down 41% and 42% respectively.

The Directors have declared a fourth interim dividend of HK\$2.80 per share. This brings the total distribution for 2016 to HK\$6.10 per share, compared with HK\$5.70 per share in 2015, excluding the HK\$3.00 special dividend that was issued in 2015.

### Economic Environment

Growth has been reported in advanced economies following steps by major central banks to act against economic and financial market risks. In the US, growth averaged 2.7% in the second half of 2016, up from 1.1% in the first half. Second-half growth in the eurozone was 1.8%, a small increase from 1.7% in the first half.

Economic growth on the Mainland was within the Central Government's target range last year, due in part to the success of policy measures designed to support economic stability and long-term economic transition. While full-year GDP growth for 2016 was 6.7%, its slowest rate in 26 years, growth in the fourth quarter accelerated for the first time in two years to 6.8%. We expect the Mainland economy to maintain a similar pace of annual expansion in 2017.

The US is on track to tighten monetary policy, but the gradual pace of interest rate rises suggests that its impact on Hong Kong should be moderate. While potential changes in international trade policies are clouding the outlook for Sino-US trade relations, growth in Hong Kong's domestic service sector has remained steady. Our forecast is for annual GDP growth in Hong Kong to rise to 1.8% in 2017 from an estimated 1.4% in 2016.

I would like to take this opportunity to recognise the commitment and contributions of staff and senior management in upholding our core principle of service excellence and ensuring we deliver on our sustainable growth objectives. I remain deeply grateful to the Bank's Non-executive Directors for their wise counsel and vigilance on governance matters in the interest of Hang Seng's stakeholders. I also wish to sincerely thank our customers and shareholders for their continuing loyalty and trust.

Uncertainties over global trade, the evolving credit conditions and economic adjustment on the Mainland will continue to create challenges for business. Supported by our strong market position, large client base and sustainable growth strategy, we will invest resources in enhancing efficiency, acting swiftly on new business opportunities and deepening customer relationships to increase value for shareholders.

**Raymond Ch'ien**

Chairman

Hong Kong, 21 February 2017



## CHIEF EXECUTIVE'S REPORT

In challenging operating conditions, Hang Seng Bank maintained good business momentum by recognising and responding swiftly to changes in the market and the evolving needs of customers.

We embraced the use of technology and data analytics to improve our understanding of and engagement with clients. Supported by enhancements to our physical network, digital platforms and all-weather portfolio of wealth-and-health offerings, we deepened customer relationships. This enabled us to deliver a more personalised service experience.

We invested in infrastructure and technology that support closer cross-border and cross-business connectivity in order to capitalise on new opportunities and position ourselves for growth. The Hang Seng China H-Share Index Fund was among the first batch of northbound funds offered to Mainland investors in February 2016 under the Mainland-Hong Kong Mutual Recognition of Funds initiative. In September, we established Hang Seng Qianhai Fund Management Company Limited, the first Mainland-domiciled, foreign-majority-owned joint venture fund management company under CEPA. In December, we launched Shenzhen-Hong Kong Stock Connect Northbound Trading services.

We achieved solid growth in net interest income and achieved increases in operating income and profit in Commercial Banking and Global Banking and Markets. Retail Banking and Wealth Management recorded continuous growth in net interest income. We deepened our customer segmentation strategy, resulting in increased numbers of Prestige and Preferred Banking customers. Subdued investment sentiment, particularly during the first half of 2016, compared with the buoyant investment environment in 2015 had a significant impact on wealth management income. With improved investment conditions in the second half of 2016 and our continuing drive to enrich our portfolio of wealth management products, we achieved sustainable growth in investment services revenue in the second half when compared with the first half of the year.

Net interest margin improved to 1.85% through effective assets and liabilities management despite narrowing spreads on customer lending. Our strong capital base and healthy liquidity position enabled us to respond rapidly to new business opportunities and changing regulatory requirements.

We upheld our prudent credit risk management principles to maintain satisfactory asset quality in our lending and investment portfolios.

### Financial Performance

Operating profit excluding loan impairment charges declined by 1% to HK\$20,347m. Operating profit was down 2% at HK\$19,034m.

Excluding the impact of the HK\$10.6bn gain on our partial disposal of our holding in Industrial Bank in the first half of 2015, underlying attributable profit and earnings per share both declined by 4% to HK\$16,212m and HK\$8.30 respectively. On the same basis, profit before tax was down 4% at HK\$19,090m.

On a reported basis, attributable profit, earnings per share and profit before tax fell by 41%, 42% and 37% respectively, reflecting the impact of the Industrial Bank disposal gain.

Net interest income grew by 5% to HK\$22,254m, driven mainly by the 4% rise in average interest-earning assets and successful efforts to enhance the deposit mix. Targeted client and deposit acquisition strategies helped support a 3% increase in average customer deposits. Average customer lending rose by 1%. Net interest margin improved by two basis points to 1.85%.

Non-interest income declined by 16% to HK\$8,345m, due mainly to the impact of the subdued investment environment, particularly in the first half of the year.

Our cost efficiency ratio was 33.5%, compared with 33.8% in 2015.

At 31 December 2016, our common equity tier 1 capital ratio was 16.6% and our tier 1 capital ratio was 17.9%, compared with 17.7% and 19.1% respectively at the end of 2015. Our total capital ratio was 20.8%, compared with 22.1% a year earlier.

## **Recognising Challenges, Responding to Change**

The uncertain global environment, economic deleveraging on the Mainland and strong competition in the banking sector will continue to create challenging operating conditions.

At the same time, the Mainland's commitment to open up its financial sector and strengthen regional and international economic ties, particularly as part of the 'One Belt, One Road' initiative, will drive demand for innovative financial services and generate new business opportunities.

Hong Kong is among the most competitive economies in the world. Its success as an international finance and trade hub and the primary gateway for cross-border business activities between the Mainland and the overseas markets is built on making the best of its competitive strengths. These include comprehensive financial and investor protection frameworks, openness to new opportunities and ideas, and the ability to rapidly adapt to new situations.

As Hong Kong's leading domestic bank, we will pursue our sustainable growth strategy by further leveraging our strong financial fundamentals, unique market position and service excellence culture. We will strengthen our competitive advantages that cannot be easily replicated.

We will continue to refine our customer segmentation strategy and strengthen client engagement by developing products and services that align with their evolving lifestyles and needs.

We will further enhance our industry sector knowledge and closely monitor market developments to support SME customers in a dynamic operating environment.

Investments in our digital platforms will be stepped up to create additional service 'touch-points' to deliver greater wealth management convenience and choice. This will deepen our relationships with existing clients and drive new customer acquisitions. We will also embrace smart use of technology to realise further efficiency gains.

The close integration of our well-developed cross-border infrastructure supports our strong market position for core banking services and provides an excellent framework for capitalising on new business opportunities.

We will continue to actively manage our capital and liquidity to ensure we remain well prepared to respond to changes in the regulatory landscape and market conditions.

In recognition of our role and responsibilities as a good corporate citizen, we actively support a variety of programmes that promote social and environmental well-being in our community, focusing particularly on youth development.

As we move forward in a rapidly evolving operating environment, I wish to recognise the invaluable contributions of my colleagues in working to achieve the strategic initiatives that will ensure we continue to deliver service excellence for customers and increase value for shareholders.

**Rose Lee**

Vice-Chairman and Chief Executive  
Hong Kong, 21 February 2017

## **BUSINESS REVIEW**

The slow pace of investment market activity, an increasingly complex credit environment and ongoing economic adjustment in mainland China created challenges for business in 2016.

Building on our unique set of competitive advantages, we leveraged data analytics and made further investments in our service network, product portfolio and technology to deepen relationships with customers and strengthen our leading market position.

In difficult conditions for lending and growing pressure on loan spreads, we focused on maintaining good asset quality. Gross loans and advances increased by HK\$10bn, or 1%, to HK\$701bn. Customer deposits, including certificates of deposit and other debt securities in issue, grew by HK\$32bn, or 3%, to HK\$1,029bn compared with the end of 2015, with increased contribution from current and savings accounts.

### **Retail Banking and Wealth Management**

Initiatives implemented by Retail Banking and Wealth Management to further strengthen analytics and refine client segmentation resulted in an increase in the affluent customer base. We leveraged our enhanced portfolio management capabilities to deepen customer relationships, driving growth in deposits and uplifting wealth management product penetration. We further embedded digital and mobile platforms into the customer service experience and used our enhanced client knowledge and diverse product suite to offer timely all-weather wealth management solutions.

We recorded a 2% decrease in operating profit excluding loan impairment charges to HK\$9,507m and a 4% decline in operating profit to HK\$8,774m. This mainly reflects the impact of the downturn in global investment sentiment on wealth management business in the first half of the year.

Effective use of our trusted brand, extensive distribution network and customer analytics drove solid balance sheet growth. Net interest income increased by 8% to HK\$12,195m. Customer deposits rose by 6% and we enhanced the deposit mix. Customer lending increased by 2% year on year.

Non-interest income declined by 28% to HK\$3,669m, reflecting subdued investment activity and a change in the way we present expenses related to the credit card loyalty programme. Wealth management income was down 13% at HK\$5,741m. Supported by our diverse portfolio of wealth management products and strong data analytics capabilities, our swift response to the changing needs of customers drove a significant improvement in our year-on-year performance in the second half of 2016.

Unsecured lending remained a solid revenue driver. Supported by effective marketing and our large credit card customer base, we achieved an above-market average year-on-year increase in card spending. In a volatile property market, we grew mortgage balances in Hong Kong by 1% year on year and maintained our top-three market position in terms of new residential mortgage registrations. Our effective client segmentation strategy and good collaboration with business partners led to an 11% rise in mortgages on the Mainland.

We proactively managed our credit risk to maintain satisfactory asset quality.

The unfavourable investment market conditions in the first half had an adverse impact on investment income in 2016, which fell by 23% year on year to HK\$2,793m. Against the high baseline created by the active market in 2015, securities turnover and revenue for the year dropped by 49% and 43% respectively. Excluding securities, other investment income recorded a moderate decline of 6%. We achieved a 17% improvement in investment income in the second half of 2016 compared with the first half.

Insurance income was down 2% at HK\$2,948m, due mainly to lower returns from the insurance investment portfolio. New annualised life insurance premiums increased by 13%. We enriched our range of wealth-and-health offerings for different customer segments. In close cooperation with Bupa, our strategic healthcare partner, we leveraged tailored products to meet a diverse range of medical protection needs.

We moved forward with our strategy for capturing long-term business growth opportunities on the Mainland. Our Hang Seng China H-Share Index Fund was in the first batch of northbound funds offered to Mainland investors through the Mainland-Hong Kong Mutual Recognition of Funds initiative. Our foreign-majority-owned joint venture fund management company in Qianhai commenced operations in September and we began providing northbound trading services under Shenzhen-Hong Kong Stock Connect following the scheme's launch in December.

We made further investments in our online and mobile platforms to provide customers with a fast and convenient banking experience. We introduced Apple Pay and Android Pay services for our credit card customers, and launched Hang Seng Easy Pay, which provides a simple and swift way to make person-to-person fund transfers.

Enhancements to our customer segmentation strategy strengthened our ability to recognise the wealth management needs and lifestyle priorities of our clients across our diverse customer base and respond with the appropriate products and services in a timely manner. A 41% year-on-year increase in the affluent Prestige Signature customer base was achieved in Hong Kong in 2016.

## **Commercial Banking**

Commercial Banking deepened customer relationships and leveraged its strong cross-border connectivity to achieve balanced growth in customer deposits and advances. In an uncertain operating environment for many businesses, our industry sector expertise supported the needs of commercial clients and added value by providing flexible financial management solutions. To drive non-fund income, we stepped up efforts to strengthen our transaction banking product capabilities and enhance corporate wealth management penetration.

The growth of our SME business remained a strategic focus. Upgrades to our digital and physical service channels reinforced the competitiveness of our extensive distribution network and enhancements to our integrated financial services proposition have further strengthened customer engagement, resulting in solid revenue growth.

These initiatives enabled us to maintain good business momentum and achieve a 2% increase in operating profit excluding loan impairment changes to HK\$5,869m. Operating profit rose by 1% to HK\$5,279m.

Net interest income increased by 3% to HK\$6,132m, due mainly to good growth in average current and savings deposits. Customer advances rose by 1%, reflecting the soft demand for loans in Hong Kong in the challenging economic conditions. We continued to take a proactive approach to credit risk management and maintained good overall credit quality.

Non-interest income fell by 3% to HK\$2,208m. Reduced customer demand for renminbi-related hedging solutions led to a 77% drop in revenue from structured foreign exchange products. This was partly offset by encouraging growth in income from insurance, foreign exchange and remittances, which increased by 36%, 33% and 14% respectively.

We achieved an 8% increase in income from SME business. SME deposits rose by 9% in response to our successful strategy to acquire Mainland customers, which accounted for 61% of newly acquired clients in 2016. Among SME customers, we achieved a 30% increase in fees from distribution of insurance products and a 13% rise in fees from remittances and account-related services. We opened our Hankow Road Business Banking Centre in July 2016 in a more spacious environment that is closer to our retail branch in the area for better synergy in driving cross-business referrals.

We strengthened our transactional banking capabilities to provide swift, secure and efficient financial solutions. Our two-way cross-border renminbi sweeping solution and Global Liquidity Engine service enhanced the effectiveness of the liquidity management of our customers engaged in cross-border business. Working jointly with MasterCard, we are the first bank in Hong Kong to launch 'Pay Smart', a virtual credit card service to help clients better manage their expenses. We introduced a Supply Chain Finance solution to strengthen our trade proposition and initiatives to strengthen our digital services proposition include the launch of a new Business Banking mobile app. Our approval to open free-trade accounts for Mainland customers has improved our ability to help clients capitalise on business opportunities in Greater China.

This strong commitment to supporting customer needs has won us industry recognition, including being named 'Hong Kong Domestic Trade Finance Bank of the Year' by *Asian Banking & Finance*, 'The Best Payment Bank in Hong Kong' by *The Asian Banker* and 'Best in Treasury and Working Capital – SMEs, Hong Kong' by *The Asset*.

## **Global Banking and Markets**

Global Banking and Markets recorded an 8% increase in operating profit excluding loan impairment charges to HK\$4,806m and a 7% rise in operating profit to HK\$4,816m.

Net interest income rose by 14% to HK\$3,993m. Non-interest income decreased by 10% to HK\$1,722m. Customer advances rose by 1% and customer deposits declined by 9%.

### ***Global Banking***

As part of our cross-border business strategy, our Global Banking team provided onshore and offshore financing and transaction banking services to capture opportunities arising from the 'One Belt, One Road' initiative, in Qianhai and in other free trade zones. We deepened customer relationships by providing tailor-made cash management solutions to facilitate payments and collections.

We used the Bank's well-developed cross-business referral infrastructure to drive the growth of wealth management business among retail and commercial customers. We leveraged our Corporate Employees Privilege Programme to acquire new customers and increase product penetration rates.

Net operating income rose by 1% to HK\$2,339m. Operating profit excluding loan impairment charges was up 3% at HK\$1,867m and operating profit increased by 1% to HK\$1,877m.

Net interest income rose by 5% to HK\$1,989m. Customer advances grew by 1% and customer deposits dropped by 10%. Non-interest income fell by 12% to HK\$340m. Solid growth in general insurance sales drove a 16% increase in wealth management income to HK\$71m, but this was outweighed by a drop in revenue from credit card merchant business and reduced loan commission income with the lower level of lending activity.

### ***Global Markets***

With high volatility in the financial markets in 2016, Global Markets proactively managed the Bank's balance sheet and contributed significantly to the growth in net interest income.

Close collaboration with retail, commercial and global banking teams further anchored client relationships through increased cross-selling of treasury products, underpinning good growth in general foreign exchange business.

Operating profit increased by 11% to HK\$2,939m.

Effective balance sheet management to enhance yields drove a 24% increase in net interest income to HK\$2,004m.

Non-interest income fell by 10% to HK\$1,382m, due mainly to the 12% decline in trading income. Solid growth in income from general foreign exchange-related products helped mitigate the adverse impact of lower customer demand for structured treasury products.

In the challenging interest rate environment, we focused on growing non-fund income, including by further leveraging our strong cross-business customer referral infrastructure.

In July, we were approved as a member of the China Interbank FX Market. This will enhance the efficiency of our renminbi-related foreign exchange business by enabling us to conduct foreign exchange transactions through the China Foreign Exchange Trade System directly for renminbi purchases and sales business.

## **Hang Seng Indexes**

Wholly owned subsidiary Hang Seng Indexes Company Limited (Hang Seng Indexes) moved forward with its objective of providing market benchmarks and indexes that can serve as the basis for developing index-linked products. Good progress towards this goal is reflected in the growing number of exchange-traded products that have been licensed to track the Hang Seng Family of Indexes.

Twelve new exchange-traded products based on the Hang Seng Family of Indexes were listed in 2016, taking the total number of such products to 46 worldwide, with listings on 17 different stock exchanges. As at the end of 2016, assets under management through these products had reached close to US\$27bn – a 12% increase compared with the previous year. Assets under management of Mainland-listed products linked to the Hang Seng Index and the Hang Seng China Enterprises Index had reached more than US\$3.5bn – almost double the amount recorded a year earlier.

Six futures products based on the Hang Seng Sector Index Series were also launched in 2016.

The total number of futures and options contracts traded on the Hang Seng Index and the Hang Seng China Enterprises Index was over 97m, an increase of 20% compared with the previous year. The open interest of H-shares Index Options was 3.2m contracts on 28 December 2016, up from the previous high of 2.6m contracts on 25 September 2015.

In order to meet the growing demand arising from the development of mutual market access between the Mainland and Hong Kong, Hang Seng Indexes launched the Stock Connect Hong Kong Index Series, which includes the Hang Seng Stock Connect Hong Kong Index, the Hang Seng Stock Connect Hong Kong MidCap & SmallCap Index and the Hang Seng Stock Connect Hong Kong SmallCap Index.

Hang Seng Indexes now compile 469 indexes – 79 real-time and 390 daily indexes – under 93 different index series, including 15 cross-border series.

Recognition for Hang Seng Indexes' work during 2016 includes being named 'Best Index Provider for ETFs, Hong Kong' by *The Asset* and 'Best Index Provider, Asia Pacific' by *Structured Retail Products*, and receiving an 'Excellent Brand of Indexes –2016 Hong Kong Leaders' Choice' award from Metro Finance.

## **Awards**

### **Hong Kong**

**Best Bank – Domestic (Hong Kong) (17th consecutive year)**

*The Asset*

**Best Private Bank in Hong Kong**

*Global Finance*

**Best SME's Partner Award**

*The Hong Kong General Chamber of Small and Medium Business*

**Hong Kong Domestic Trade Finance Bank of the Year**

*Asian Banking & Finance*

**Trusted Brands Gold Award – Bank (Hong Kong)**

*Reader's Digest*

**Trusted Brands Gold Award – Credit Card Issuing Bank (Hong Kong)**

*Reader's Digest*

### **Mainland China**

**Most Trustworthy Bank**

*CFO World*

**Best Foreign Bank**

*Sina Finance*

**Most Popular Wealth Management Provider**

*Nanfang Daily*

**Innovation Award for Corporate Banking**

*21st Century Business Herald*

## **Business Initiatives**

### **A Perfect Match**

Combining big data analytics with the expertise and experience of our staff is giving us greater insight into the evolving needs of our customers. Leveraging the speed, reach and precision enabled by the latest digital technology, we are using this in-depth customer knowledge to better deliver relevant and timely financial services.

### **A Platform for Customer Engagement**

We recognise the value of working in partnership with an informed and engaged customer base. Using social media platforms such as Facebook and YouTube, we facilitate our clients in their financial decision-making by offering timely analysis and insights into key global and regional developments. Our Facebook live commentary on various major international events has been well-received by customers.

### **Digital Solutions for Modern Lifestyles**

Our digital platforms and contactless payment channels provide financial convenience and choice for our increasingly mobile and tech-savvy customers. The Hang Seng Easy Pay service offers our clients a simple and secure way to make payments using their mobile phones. We were also among the first banks in Hong Kong to introduce Apple Pay and Android Pay services for customers.

### **A Premium Wealth Management Experience**

Our customer segmentation strategy recognises the particular financial needs and priorities of high-net-worth clients. Leveraging our well-rounded portfolio of wealth-and-health products, incisive market analysis capabilities and relationship management expertise, we are creating premium solutions that support our customers in achieving their wealth management, retirement planning and well-being objectives.

### **A Trusted Partner for SMEs**

With our deep community roots and specialist knowledge of different industries, we have a long track record as a trusted financial partner for SMEs. In a rapidly evolving economic environment, we are leveraging our strong cross-border capabilities and diverse portfolio of services and products to help our SME customers adapt to changing market conditions and grasp new business opportunities.

### **Reflecting Our Values Through the Hang Seng Brand**

As one of our most valuable business assets, our brand is widely associated among our clients with values such as integrity, pragmatism and service excellence. This recognition and trust is reflected in a series of short videos made in partnership with Commercial Banking customers who share the reasons they have chosen to put their trust in Hang Seng.

### **Expanding Wealth Management on the Mainland**

As the first foreign-majority-owned joint venture fund management company on the Mainland under CEPA, Hang Seng Qianhai Fund Management Company Limited represents our drive to expand in the Pearl River Delta and capitalise on the growth in cross-border economic activity by offering one-stop financial solutions to customers. Our wealth management services aim to provide Mainland individual and institutional investors with greater choice and promote the development of the financial services industry on the Mainland.



# MANAGEMENT DISCUSSION AND ANALYSIS

## FINANCIAL REVIEW

### FINANCIAL PERFORMANCE

#### Income Statement

##### Summary of financial performance

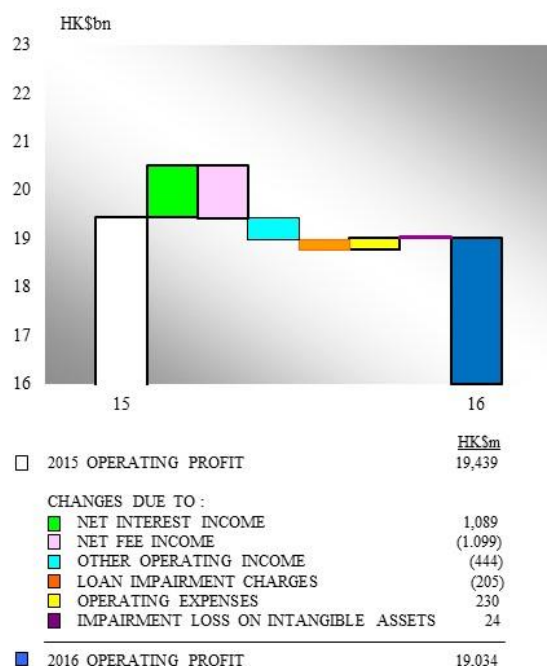
Figures in HK\$m

	2016	2015
Total operating income	44,133	44,021
Operating expenses	10,252	10,482
Operating profit	19,034	19,439
Profit before tax	19,090	30,488
Profit attributable to shareholders	16,212	27,494
Earnings per share (in HK\$)	8.30	14.22

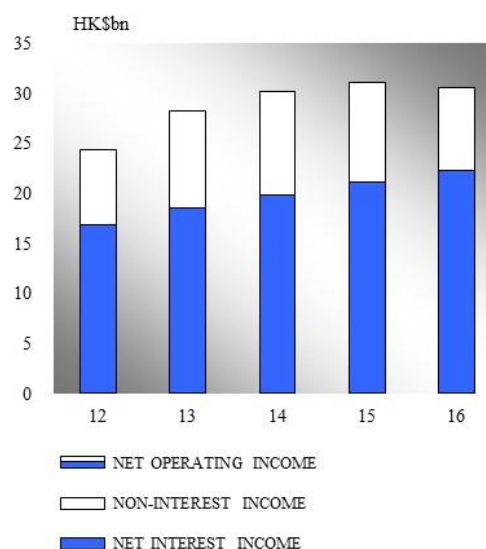
In challenging operating conditions, Hang Seng Bank Limited ('the Bank') and its subsidiaries ('the Group') returned solid results for 2016.

**Operating profit excluding loan impairment charges and other credit risk provisions** was HK\$20,347m, down 1% compared with 2015, due mainly to a reduction in wealth management income in the subdued investment environment, particularly as compared with the buoyant conditions in 2015. The decline in wealth management income was partially offset by robust growth in net interest income and efforts to contain operating expenses at a lower level than in 2015. **Operating profit** was HK\$19,034m, down 2% compared with 2015, reflecting higher loan impairment charges. The HK\$10,636m gain on the partial disposal of Industrial Bank in 2015 saw **profit attributable to shareholders** fall by 41% to HK\$16,212m in 2016. Excluding this gain and after taking into account the property revaluation deficit compared with a revaluation surplus for 2015, attributable profit was down 4%.

#### OPERATING PROFIT ANALYSIS



#### NET OPERATING INCOME (Before loan impairment charges)



**Net interest income** increased by HK\$1,089m, or 5%, to HK\$22,254m, underpinned by the 4% rise in average interest-earning assets.

*Figures in HK\$m*

	<u>2016</u>	<u>2015</u>
Net interest income/(expense) arising from:		
- financial assets and liabilities that are not at fair value through profit and loss	23,124	22,642
- trading assets and liabilities	(845)	(1,450)
- financial instruments designated at fair value	(25)	(27)
	<u>22,254</u>	<u>21,165</u>
Average interest-earning assets	1,201,207	1,156,534
Net interest spread	1.76 %	1.71 %
Net interest margin	1.85 %	1.83 %

**Average interest-earning assets** increased by HK\$45bn, or 4%, when compared with last year. Average customer lending increased by 1%, mainly affected by subdued loan demand together with the decrease in cross-border funding activities. Average financial investments increased by 23% partly offset by the 31% fall in interbank placement.

**Net interest margin** improved by two basis points to 1.85% whilst the net interest spread increased by five basis points to 1.76%. Average loan spread on customer lending reduced, notably on corporate and commercial term lending. Treasury's active management of interest rate risk and active efforts to enhance returns on the commercial surplus led to an increase in balance sheet management income. Customer deposits spread also widened as a result of the change in deposit mix, with increased contribution from low cost savings accounts and current deposit accounts balance. Contribution from net free funds fell by three basis points to 0.09%.

Net interest income in the second half of 2016 increased by HK\$248m, or 2%, compared with the first half, mainly supported by steady increase in average interest-earning assets and more calendar days in the second half. Net interest margin increased by one basis point.

The HSBC Group reports interest income and interest expense arising from financial assets and financial liabilities held for trading as 'Net trading income'. Income arising from financial instruments designated at fair value through profit and loss is reported as 'Net income from financial instruments designated at fair value' (other than for debt securities in issue and subordinated liabilities, together with derivatives managed in conjunction with them).

The table below presents the net interest income of Hang Seng Bank, as included in the HSBC Group accounts:

<i>Figures in HK\$m</i>	<u>2016</u>	<u>2015</u>
Net interest income and expense reported as 'Net interest income'		
- Interest income	<b>26,193</b>	26,743
- Interest expense	<b>(3,110)</b>	(4,135)
- Net interest income	<b>23,083</b>	22,608
Net interest income and expense reported as 'Net trading income'	<b>(845)</b>	(1,450)
Net interest income and expense reported as 'Net income from financial instruments designated at fair value'	<b>16</b>	7
Average interest-earning assets	<b>1,155,824</b>	1,116,125
Net interest spread	<b>1.92 %</b>	1.91 %
Net interest margin	<b>2.00 %</b>	2.03 %

**Net fee income** decreased by HK\$1,099m, or 16%, to HK\$5,939m, reflecting the decline in investment market activity, particularly in the first half of the year, which led to a reduction in wealth management income. Income from securities broking and retail investment fund sales fell by 37% and 11% respectively.

Insurance commission increased by 43%, reflecting higher distribution fees received from our exclusive partnership arrangement with Bupa due to the Group achieving its cumulative value contribution target as well as commission originating from life reinsurance business solutions. Credit card fee income rose by 5%, benefiting from increased cardholder spending and merchant-acquiring business in Hong Kong. Fees from account services and remittances increased by 6% and 8% respectively.

**Net trading income** decreased by HK\$345m, or 17%, to HK\$1,685m. Foreign exchange income was down by HK\$536m, or 26%, as increased revenue from higher customer activity was more than offset by reduced demand for foreign-exchange-linked structured treasury products – particularly renminbi-linked structured products – and lower income from funding swaps. Income from interest rate derivatives, debt securities, equities and other trading activities recorded a gain of HK\$100m compared with a loss of HK\$67m in 2015, mainly reflecting the favourable fair value movement of equity-linked derivatives products in the life insurance business investment portfolio.

**Net income/(loss) from financial instruments designated at fair value recorded net gain of HK\$73m, compared with a net loss of HK\$118m for 2015**, reflecting the fair value changes of assets held by the life insurance business. To the extent that this fair value gain/(loss) is attributable to policyholders, there is an offsetting movement reported under 'net insurance claims and benefits paid and movement in liabilities to policyholders' or 'movement in present value of in-force long-term insurance business ('PVIF')'.

## Analysis of income from wealth management business

Figures in HK\$m

	2016	2015
Investment income:		
- retail investment funds	1,458	1,645
- structured investment products <sup>†</sup>	454	684
- securities broking and related services	1,143	1,829
- margin trading and others	103	100
	<b>3,158</b>	4,258
Insurance income:		
- life insurance	3,101	3,123
- general insurance and others	355	259
	<b>3,456</b>	3,382
Total	<b>6,614</b>	7,640

<sup>†</sup> Income from structured investment products includes income reported under net fee income on the sales of third-party structured investment products. It also includes profits generated from the selling of structured investment products in issue, reported under net trading income.

Wealth management business income fell by HK\$1,026m, or 13%, to HK\$6,614m. Investment income fell by 26%, notably in retail investment funds, structured investment products and securities broking and related services in the subdued investment environment, particularly as compared with the buoyant conditions in 2015. Insurance business income grew by 2%, benefiting from the increase in general insurance business income.

## Analysis of insurance business income

Figures in HK\$m

	2016	2015
Life insurance:		
- net interest income and fee income	3,582	3,230
- investment returns on life insurance funds (including share of associate's profit and surplus on property revaluation backing insurance contracts)	(239)	(152)
- net insurance premium income	11,059	9,845
- net insurance claims and benefits paid and movement in liabilities to policyholders	(13,534)	(12,968)
- movement in present value of in-force long-term insurance business	2,233	3,168
	<b>3,101</b>	3,123
General insurance and others	355	259
Total	<b>3,456</b>	3,382

Insurance business income increased by HK\$74m, or 2%, to HK\$3,456m.

Net interest income and fee income from life insurance business grew by 11%, as the size of the life insurance funds investment portfolio grew, reflecting a net inflow from new and renewal business. The investment return on life insurance business was, however, affected by unfavourable movements in the equities markets. To the extent that these investment returns were attributable to policyholders, there was an offsetting movement in net insurance claims and benefits paid and movement in liabilities to policyholders or present value of in-force long-term insurance business ('PVIF').

Net insurance premium income increased by 12% as a result of higher premiums received from successful sales initiatives for annuity and endowment products. The rise in insurance premiums resulted in a corresponding increase in net insurance claims and benefits paid and movement in liabilities to policyholders.

The movement in PVIF decreased by 30%, reflecting the net result of an unfavourable change in market conditions from discount rate updates and new business written throughout the year. General insurance income increased by 37%, with our efforts to further leverage our exclusive partnership arrangement with Bupa resulting in higher distribution commission.

**Loan impairment charges and other credit risk provisions** increased by HK\$205m, or 19%, to HK\$1,313m, reflecting the more challenging credit environment. Gross impaired loans and advances increased by HK\$498m, or 18%, to HK\$3,235m against 2015 year-end, due mainly to certain corporate exposures on the Mainland. Gross impaired loans and advances as a percentage of gross loans and advances to customers stood at 0.46% at the end of December 2016, compared with 0.55% at the end of June 2016 and 0.40% at the end of December 2015. Overall credit quality remained sound.

*Figures in HK\$m*

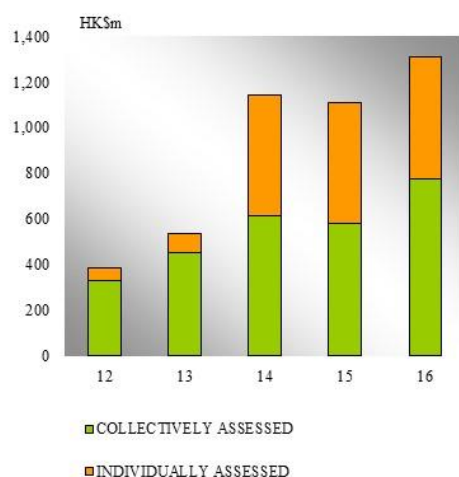
	<u>2016</u>	<u>2015</u>
Net charge for impairment of loans and advances to customers:		
Individually assessed impairment charges:		
- new charges	662	594
- releases	(43)	(50)
- recoveries	(80)	(16)
	<u>539</u>	<u>528</u>
Collectively assessed impairment charges	<u>774</u>	<u>580</u>
Loan impairment charges and other credit risk provisions	<u><u>1,313</u></u>	<u><u>1,108</u></u>

Individually assessed impairment charges were broadly unchanged, as the increase in new impairment charges were almost offset by higher release and recoveries from corporate and commercial customers during the year. Collectively assessed impairment charges increased by HK\$194m, or 33%, to HK\$774m, mainly reflecting the increase in the collectively assessed impairment charges on the credit card and personal loan portfolios. Impairment allowances for loans not individually identified as impaired recorded a net charge compared with a net release in 2015, mainly due to a higher net release for Hong Kong loan portfolios in 2015. The Group maintains a cautious outlook on the credit environment and will proactively enhance asset quality by maintaining a prudent approach in growing the loan portfolio.

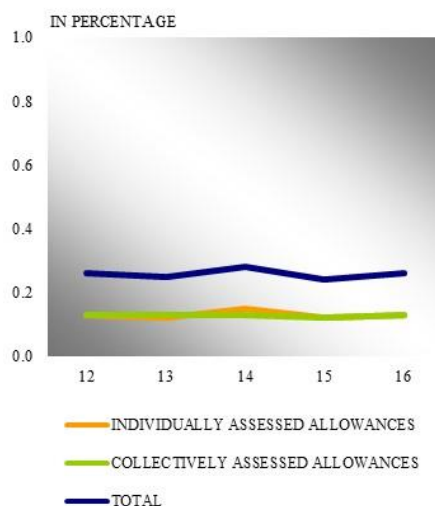
Total loan impairment allowances as a percentage of gross loans and advances to customers are as follows:

	<u>At 31 December 2016</u>	<u>At 31 December 2015</u>
	%	%
Loan impairment allowances:		
- individually assessed	0.13	0.12
- collectively assessed	<u>0.13</u>	<u>0.12</u>
Total loan impairment allowances	<u><u>0.26</u></u>	<u><u>0.24</u></u>

**LOAN IMPAIRMENT CHARGES**



**LOAN IMPAIRMENT ALLOWANCES AS A PERCENTAGE OF GROSS LOANS AND ADVANCES TO CUSTOMERS**



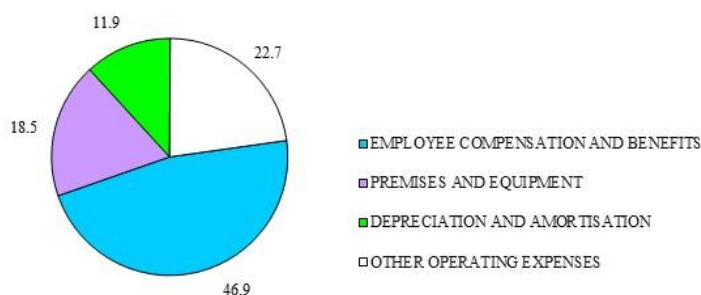
**Operating expenses** decreased by HK\$230m, or 2%, to HK\$10,252m, reflecting careful cost control. Staff costs were down by 2%, due mainly to the annual salary increment being more than offset by lower performance-related pay expenses and lower headcount.

Depreciation charges were up 16%, reflecting higher depreciation charges on business premises following the upward commercial property revaluation last year and the increased depreciation on a bank property as a result of the change in property usage to support back-office functions. This was partly offset by the 7% decrease in general and administrative expenses.

The Group continued to focus on enhancing operational efficiency while maintaining growth momentum. The cost efficiency ratio was 30 basis points lower at 33.5% compared with 2015.

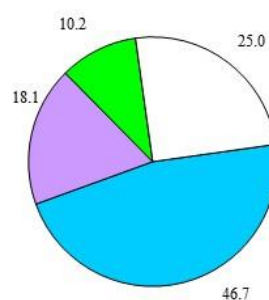
#### OPERATING EXPENSES FOR 2016

IN PERCENTAGE



#### OPERATING EXPENSES FOR 2015

IN PERCENTAGE



#### Full-time equivalent staff numbers by region

	<u>2016</u>	<u>2015</u>
Hong Kong and others	7,977	8,306
Mainland	<u>1,731</u>	<u>1,835</u>
Total	<u><b>9,708</b></u>	<u><b>10,141</b></u>

**Operating profit decreased by HK\$405m, to HK\$19,034m.**

**Profit before tax** decreased by HK\$11,398m, or 37%, to HK\$19,090m (down 4% after excluding the gain on the partial disposal of Industrial Bank in 2015) after taking the following major items into account:

- the gain on partial disposal of Industrial Bank of HK\$10,636m in the first half of 2015;
- a revaluation deficit of HK\$37m compared with a revaluation surplus of HK\$261m in 2015 in **net surplus on property revaluation**; and
- a HK\$59m decrease in **share of profits from associates**, mainly from a property investment company.

**Property revaluation**

<i>Figures in HK\$m</i>	<u>2016</u>	<u>2015</u>
Net (deficit)/ surplus on property revaluation	<u>(37)</u>	<u>261</u>

The Group's premises and investment properties were revalued at 30 November 2016 and updated for any material changes at 31 December 2016 by DTZ Cushman & Wakefield Limited. The valuation was carried out by qualified persons who are members of the Hong Kong Institute of Surveyors. The basis of the valuation of property was market value which is consistent with the definition of fair value under HKFRS 13 'Fair Value Measurement' and takes into account the highest and best use of the property from the perspective of market participants. The highest and best use takes into account the use of the property that is physically possible, legally permissible and financially feasible as described in HKFRS 13. The net revaluation surplus for Group premises amounted to HK\$853m was credited to the premises revaluation reserve. The related deferred tax provision for Group premises was HK\$144m. Revaluation deficit of HK\$37m on investment properties (excluding the revaluation gain on properties backing insurance contracts) were recognised through the income statement.

**Second half of 2016 compared with first half of 2016**

Against the first half of 2016, the Group continued to make good progress and achieved sustainable growth in revenues to return solid results for the second half. Attributable profit grew by HK\$202m, or 3%, driven by increases in net interest income and net fee income and a reduction in loan impairment charges.

Net interest income grew by HK\$248m, or 2%, due mainly to the increase in average interest-earning assets, more calendar days in the second half and a stable net interest margin despite continuous downward pressure in the challenging operating environment. Non-interest income decreased by HK\$83m, or 2%. There was an improvement in investment income, with higher income from retail investment funds, cards, brokerage and structured investment products. These were more than offset by lower insurance income, reflecting an unfavourable change in market conditions from discount rate update.

Operating expenses increased by 6%, mainly reflecting an increase in general and administrative expenses that was partly offset by reduced staff costs. Loan impairment charges decreased by 18%, reflecting lower individually assessed impairment charges.

## Segmental Analysis

The table below sets out the profit before tax contributed by the business segments for the years stated.

<i>Figures in HK\$m</i>	<i>Retail Banking and Wealth Management</i>	<i>Commercial Banking</i>	<i>Global Banking and Markets</i>	<i>Other</i>	<i>Total</i>
<i>Year ended</i>					
<i>31 December 2016</i>					
Profit before tax	<u>8,867</u>	<u>5,279</u>	<u>4,816</u>	<u>128</u>	<u>19,090</u>
Share of profit before tax	<u>46.4 %</u>	<u>27.7 %</u>	<u>25.2 %</u>	<u>0.7 %</u>	<u>100.0 %</u>
<i>Year ended</i>					
<i>31 December 2015</i>					
Profit before tax	<u>9,250</u>	<u>5,212</u>	<u>4,506</u>	<u>11,520</u>	<u>30,488</u>
Share of profit before tax	<u>30.3 %</u>	<u>17.1 %</u>	<u>14.8 %</u>	<u>37.8 %</u>	<u>100.0 %</u>
Share of profit before tax (excluding the gain on partial disposal of Industrial Bank)	<u>46.6 %</u>	<u>26.3 %</u>	<u>22.7 %</u>	<u>4.4 %</u>	<u>100.0 %</u>

**Retail Banking and Wealth Management ('RBWM')** recorded a 2% year-on-year decline in operating profit excluding loan impairment charges to HK\$9,507m. Operating profit and profit before tax both decreased 4% year-on-year to HK\$8,774m and HK\$8,867m respectively. This mainly reflects the impact of the downturn in global investment sentiment on wealth management business in early 2016 compared with the high level of investment market activity in 2015.

In the uncertain economic environment, we made good use of our extensive network and trusted brand to achieve solid balance sheet growth. Together with improved returns from fixed income investments in our insurance investment portfolio, net interest income increased by 8% year-on-year to HK\$12,195m. Customer deposits grew by 6% and the lending portfolio expanded by 2% year-on-year. On the Mainland, strategic management of our high-cost funding helped drive a 12% increase in net interest income.

Non-interest income declined by 28% year-on-year to HK\$3,669m, largely reflecting 13% decline in wealth management business income to HK\$5,741m and a change in the way we present expenses related to the credit card loyalty programme which was previously recorded under operating expenses.

Unsecured lending continued to be a solid revenue driver. With effective marketing campaigns and a good quality credit card customer base, we achieved an above market average year-on-year increase in card spending in Hong Kong. With the gradual rise in the market bankruptcy rate in the first half of 2016, we struck a good balance between business growth and risk exposure for our personal loan business. The size of the personal loan portfolio in Hong Kong remained the same as a year earlier.

The property market was volatile in 2016. Transaction volume was low during the first half of 2016 but improved in the second half. We sustained our top-three position for new mortgage business in Hong Kong, with a market share of 15% in terms of new mortgage registrations. Mortgage balances grew by 1% year-on-year in Hong Kong. Supported by effective segmentation strategy and a well-established relationship with developers, mortgages on the Mainland grew 11% year-on-year.

The unfavourable global investment market conditions in early 2016 had an adverse impact on investment income, which dropped by 23% year-on-year. However, greater market uptake in the second half of 2016 drove a 17% improvement in investment income compared with the first half. In line with the slowdown in equities markets transactions against the high base in 2015, our securities turnover and revenue declined by 49% and 43% respectively. Excluding securities, other investment product revenue dropped by 6%, supported by our all-weather product portfolio. The Hang Seng China H-Share Index Fund was among the first batch of northbound funds to be offered to retail investors on the Mainland under the Mainland-Hong Kong Mutual Recognition of Funds initiative. We established the first foreign-majority-owned joint venture fund management company on the Mainland under the Mainland and Hong Kong Closer Economic Partnership Arrangement (CEPA). We also launched Shenzhen-Hong Kong Stock Connect Northbound Trading services.

Insurance income declined by 2% year-on-year. Despite the unfavourable movement in equities markets, which affected investment returns on insurance business, growth in the size of the life insurance funds investment portfolio



– reflecting a net inflow from new and renewal business –drove an 11% rise in net interest income and fee income from life insurance business. We continued to strengthen our ability to provide tailored wealth-and-health solutions by broadening our insurance product range. New annualised premiums grew 13% year-on-year, driven in part by our strong distribution network.

Good customer analytics enabled us to improve client segmentation and needs-based selling. We leveraged our high-value proposition and tailored products and services within our Prestige Banking customer base to achieve a 41% year-on-year increase in premium clients in Hong Kong.

We continued to invest in new technology and enhance our digital capabilities to provide more convenient and faster banking services that meet the needs of our increasingly mobile and tech-savvy customers. We launched Hang Seng Easy Pay, a person-to-person (P2P) fund transfer service, and introduced Apple Pay and Android Pay services to offer customers easy and secure payment solutions. We also enhanced our digital platforms to tailor information and promotional offers to better engage with our customers.

**Commercial Banking ('CMB')** business gained momentum in the second half of 2016 and achieved a 2% year-on-year growth in operating profit excluding loan impairment charges to HK\$5,869m for the year. Operating profit and profit before tax were both up 1% at HK\$5,279m.

Despite the difficult economic conditions, net interest income increased by 3%, underpinned by good growth in average current and savings deposits. Customer advances grew by 1% amid more intense competition and softer loan demand in Hong Kong.

Non-interest income declined by 3%, mainly reflecting a reduction in income from renminbi-related business due to market volatility. Fluctuations in the renminbi exchange rate reduced customer demand for hedging solutions, leading to a 77% drop in structured foreign exchange income. Leveraging our strong distribution capabilities, we narrowed the drop in non-interest income by achieving 36% growth in insurance income, a 33% rise in income from vanilla foreign exchange business and a 14% increase in remittance income. Compared to the first half of 2016, non-interest income increased by 8% in the second half of the year.

Our strategy for further strengthening our small and medium-sized enterprises ('SME') business has led to an 8% growth from related revenue. We continued to acquire new Mainland customers, which accounted for 61% of newly acquired customers in 2016. The growth in the customer base helped drive satisfactory growth of 9% in SME deposits. Leveraging our effective sales distribution and efficient service channels, we grew income from insurance distribution and from remittances and account-related fees by 30% and 13% respectively. We continued to upgrade our network to provide a better customer experience and integrated services for our SME customers. Our Hankow Road Business Banking Centre was opened in July 2016 with a more spacious environment that is closer to our retail branch in the area for better synergy in driving cross-business referrals.

We invested in technology to enhance our corporate digital banking services to serve customers in a more efficient and timely manner. The launch of a new Business Banking Mobile App, as well as HSBCnet mobile, has made it easier and more convenient for our clients to manage their accounts in a secure and reliable manner even when they are on the move.

We stepped up efforts to enhance our transaction banking services and capabilities to provide swift and efficient solutions for customers. We are one of the foreign banks on the Mainland to become a direct member of China's Cross-border Interbank Payment System (CIPS), a centralised clearing platform for cross-border renminbi transactions. Our membership of CIPS enables customers to benefit from a more efficient renminbi cross-border payment system that includes better payment cut-off times. We are the first bank in Hong Kong to launch 'Pay Smart', a joint initiative with MasterCard, which is a virtual credit card solution that can help customers manage their expenses more effectively. We launched Global Liquidity Engine in 2016 to facilitate customers' cross-border liquidity management. The introduction of a new supply chain finance solution is helping trade customers to strengthen relationships with their key suppliers by enabling the former to make early payments at a competitive discount rate.

Our efforts to assist customers have brought us industry recognition. We received the 'Outstanding Import & Export Industry Partner Award' from The Hong Kong Chinese Importers' & Exporters' Association and were named 'Hong Kong Domestic Trade Finance Bank of the Year' by *Asian Banking & Finance*. We also received the 'Best in Treasury and Working Capital – SMEs, Hong Kong' award in *The Asset Triple A Treasury, Trade and Risk Management Awards 2016* and 'The Best Payment Bank in Hong Kong' award in *The Asian Banker Transaction Banking Awards 2016*.

Our capacity to connect commercial customers to business opportunities in Greater China has been strengthened following our approval to open free-trade accounts for commercial customers.

We remained vigilant in managing asset quality, adopting a proactive approach to credit risk management that enabled us to uphold good overall credit quality.

**Global Banking and Markets ('GBM')** reported year-on-year growth of 8% in operating profit excluding loan impairment charges to HK\$4,806m and a 7% rise in operating profit and profit before tax to HK\$4,816m.

**Global Banking ('GB')** recorded a 1% year-on-year growth in net operating income to HK\$2,339m. Net interest income increased by 5% to HK\$1,989m, while non-interest income fell by 12% due to lower credit card merchant income and a decline in loan commission income. Apart from offering loan facilities to customers, we supported their debt capital market activities by distributing their new bond issuances to the Group's wealth management clients. Supported by favourable growth in general insurance sales and securities brokerage, wealth management income grew by 16% over the previous year. With stable asset quality, operating profit excluding loan impairment charges grew by 3%.

**Global Markets ('GM')** reported an 11% year-on-year rise in both operating profit and profit before tax to HK\$2,939m.

We achieved a 24% increase in net interest income to HK\$2,004m, driven mainly by higher returns resulting from effective balance sheet management. We closely monitored market movements throughout the year and managed the interest rate risk to achieve yield enhancement.

Non-interest income fell by 10% to HK\$1,382m, due primarily to the 12% drop in trading income. Reduced customer demand for foreign exchange structured products was partly offset by an increase in income from vanilla foreign exchange products resulting from increasing foreign exchange market volatility in the second half of 2016.

Under the challenging and low interest rate environment, we focused on growing non-fund income. Leveraging the Bank's strong relationships with customers, we collaborated closely with RBWM, CMB and GB to increase cross-selling of GM products.

In response to further liberalisation in renminbi-related business, we strived to provide timely market information and products to meet customer needs in the volatile foreign exchange market.

In response to the announcement of the People's Bank of China at the end of 2015 regarding the introduction of qualified foreign players, we submitted an application for China Interbank Foreign Exchange Market membership to China Foreign Exchange Trade System ('CFETS') in the first half of 2016. In July, CFETS officially approved the Bank's application, and we are able to conduct foreign exchange transactions through CFETS directly for renminbi purchases and sales business.

## Balance sheet

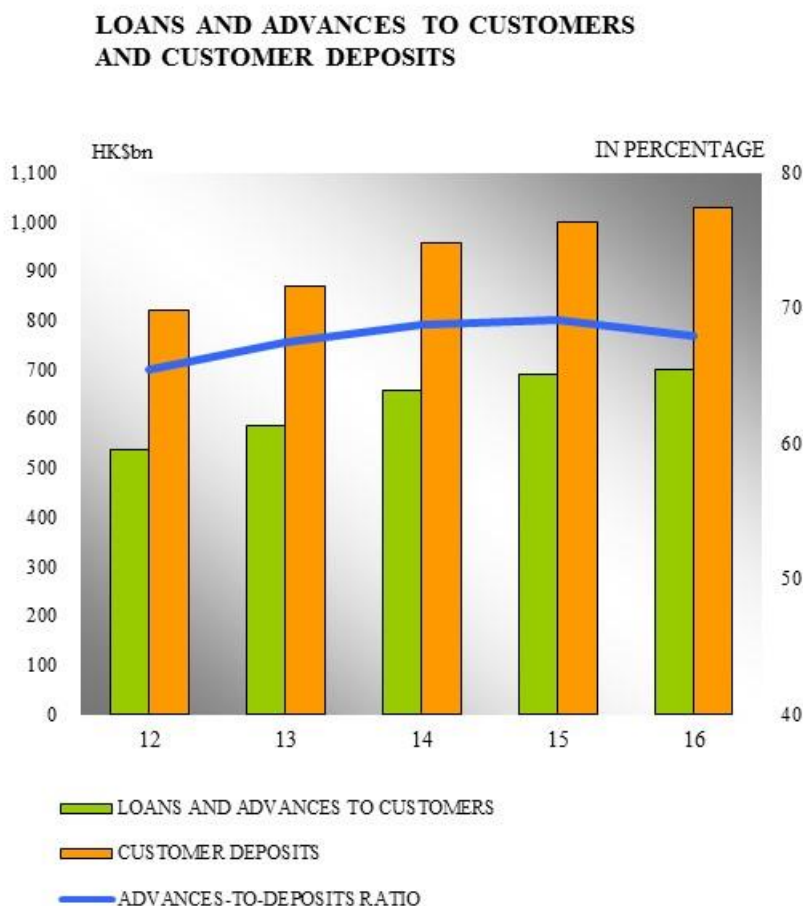
Total assets rose by HK\$43bn, or 3%, to HK\$1,377bn at 31 December 2016, on the back of the Group's strategy to enhance profitability through sustainable growth.

Cash and sight balances at central banks increased by HK\$13bn, or 130%, to HK\$23bn, mainly reflecting the increase in the commercial surplus placed with the Hong Kong Monetary Authority.

Trading assets rose by HK\$4bn, or 10%, to HK\$44bn, with the increase mainly comprised of exchange fund bills and notes.

Customer loans and advances (net of impairment allowances) grew by HK\$10bn, or 1%, to HK\$699bn, compared with the end of 2015 mainly reflecting subdued credit demand. Loans for use in Hong Kong increased by 7%, mainly in property development and investment, manufacturing, information technology and working capital financing for certain large corporate customers. Lending to individuals increased by 3% when compared with the end of 2015. The Group continued to maintain its market share for the mortgage business with residential mortgages and Government Home Ownership Scheme/Private Sector Participation Scheme/Tenants Purchase Scheme lending growing by 2% and 8% respectively. Trade finance decreased by 8%, due mainly to the contraction in cross-border lending activity and slow market conditions. Loans and advances for use outside Hong Kong fell by 11%, reflecting de-risking activity as part of our robust credit risk management strategy as well as the more subdued market environment.

Financial investments increased by HK\$26bn, or 7%, to HK\$398bn, due mainly to the increased deployment of the commercial surplus in debt securities given the subdued demand for credit. Growth in life insurance business also contributed to the increase.



## Assets Deployment

Figures in HK\$m

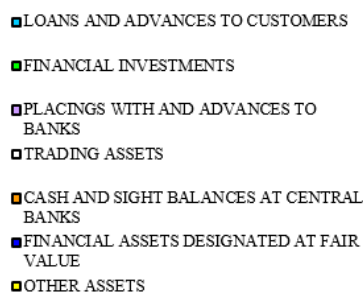
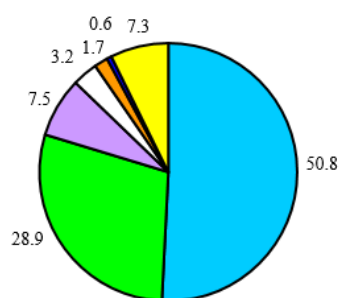
	2016	%	2015	%
Cash and sight balances at central banks	23,299	1.7	10,118	0.8
Placings with and advances to banks	103,460	7.5	123,990	9.3
Trading assets	44,427	3.2	40,373	3.0
Financial assets designated at fair value	8,523	0.6	7,903	0.6
Loans and advances to customers	698,992	50.8	688,946	51.6
Financial investments	398,137	28.9	372,272	27.9
Other assets	100,404	7.3	90,827	6.8
<b>Total assets</b>	<b>1,377,242</b>	<b>100.0</b>	<b>1,334,429</b>	<b>100.0</b>

Return on average total assets 1.2% 2.1%

Return on average total assets  
(Excluding the gain on partial disposal of Industrial Bank) 1.2% 1.3%

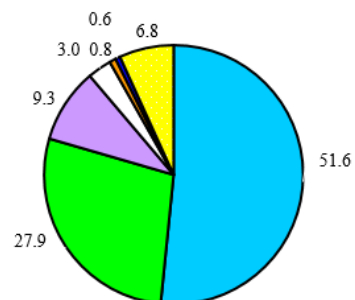
### ASSETS DEPLOYMENT FOR 2016

IN PERCENTAGE



### ASSETS DEPLOYMENT FOR 2015

IN PERCENTAGE



## Loans and Advances to Customers

Gross loans and advances to customers increased by HK\$10bn, or 1%, to HK\$701bn when compared with last year-end as credit demand remained weak amid challenging operating conditions and contraction in cross-border funding activities.

Loans and advances for use in Hong Kong rose by 7%. Lending to the industrial, commercial and financial sectors grew by 10%. Lending to property development and investment grew strongly by 18% and 10% respectively to keep stride with the buoyant property market. Financial concerns and transport and transport equipment lendings fell by 9% and 3% respectively, due mainly to loans repayment. Wholesale and retail trade lending down by 1% on the back of lackluster retail sales performance. Manufacturing and information technology lendings increased by 7% and 73% respectively, reflecting new loan drawdown. Growth in lending to 'Other' was attributable to working capital financing for certain large corporate customers.

Lending to individuals grew by 3% as compared with last year-end. The Group maintained the market share for mortgage business and grew its residential mortgage when compared with last year-end. Sustained consumer spending saw credit card advances grew by 4%. Other loans to individuals grew by 3%.

Trade finance fell by 8% against last year-end due mainly to the contraction in cross-border lending activities and slow market conditions.

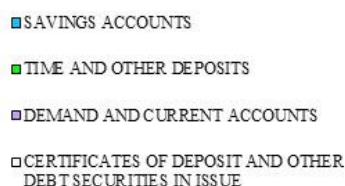
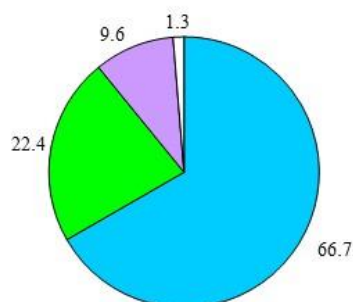
Loans and advances for use outside Hong Kong fell by 11% compared with the end of 2015, reflecting de-risking activities as part of our robust credit risk management strategy as well as the more subdued market conditions.

## Customer Deposits

Customer deposits, including certificates of deposit and other debt securities in issue, increased by HK\$32bn, or 3%, to HK\$1,029bn since 2015 year-end, with increased contribution from savings and current deposit accounts. At 31 December 2016, the advances-to-deposits ratio was 67.9%, compared with 69.1% at 31 December 2015.

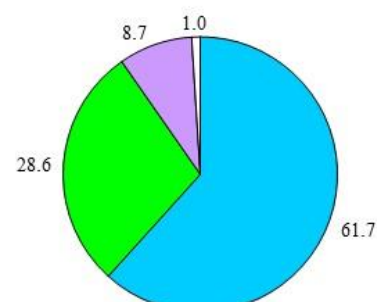
**CUSTOMER DEPOSITS FOR 2016**

IN PERCENTAGE



**CUSTOMER DEPOSITS FOR 2015**

IN PERCENTAGE



## Subordinated Liabilities

The outstanding subordinated loans serve to help the Bank maintain a balanced capital structure and support business growth.

## Shareholders' equity

<i>Figures in HK\$m</i>	<i>At 31 December 2016</i>	<i>At 31 December 2015</i>
Share capital	<b>9,658</b>	9,658
Retained profits	<b>105,204</b>	105,363
Other equity instruments	<b>6,981</b>	6,981
Premises revaluation reserve	<b>16,982</b>	16,777
Cash flow hedging reserve	<b>(128)</b>	(9)
Available-for-sale investment reserve		
- on debt securities	<b>(144)</b>	23
- on equity securities	<b>1,578</b>	1,916
Other reserves	<b>495</b>	1,272
Total reserves	<b>130,968</b>	132,323
Total shareholders' equity	<b>140,626</b>	141,981
Return on average ordinary shareholders' equity	<b>12.1 %</b>	20.7 %

Shareholders' equity fell by HK\$1bn, or 1%, to HK\$141bn when compared with 2015 year-end. Retained profits and the premises revaluation reserve remained relatively stable. The available-for-sale investment reserve decreased by HK\$0.5bn, or 26%, against the end of the previous year, mainly reflecting the fair value movement of the Group's investment in Industrial Bank and market interest rate movements. Other reserves fell by HK\$1bn, or 61%, due mainly to the depreciation of the renminbi.

**Return on average ordinary shareholders' equity** was 12.1% (20.7% for 2015). Excluding the financial impact of Industrial Bank disposal gain in 2015, return on average ordinary shareholders' equity was 12.1%, compared with 12.6% a year earlier.

There was no purchase, sale or redemption by the Bank, or any of its subsidiaries, of the Bank's listed securities during 2016.

## Management Discussion and Analysis

(Figures expressed in millions of Hong Kong dollars unless otherwise indicated)

### Risk Management

All the Group's activities involve the analysis, measurement, evaluation, acceptance and management of some degree of risk or combination of risks. The principal types of risk faced by the Group are credit risk, liquidity risk, market risk, insurance risk, operational risk and reputational risk.

#### Risk management framework

The Group's risk management policy is designed to identify and analyse risks, to set appropriate risk limits and to monitor these risks exposures continually by means of reliable and up-to-date management information systems. The Group's risk management framework/policies and risk appetite statement or major risk limits are approved by the Board of Directors and they are monitored and reviewed regularly by various Board or management committees, including the Executive Committee, Risk Committee, Asset and Liability Management Committee ("ALCO") and Risk Management Meeting ("RMM").

Robust risk governance and accountability are embedded throughout the Group through an established framework that ensures appropriate oversight of and accountability for the effective management of risk at all levels of the organisation and across all risk types.

The Board has ultimate responsibility for approving the Group's risk appetite statement and the effective management of risk. The Risk Committee advises the Board on risk appetite and its alignment with strategy, risk governance and internal controls and high-level risk related matters.

The ongoing monitoring, assessment and management of the risk environment and the effectiveness of risk management policies resides with the Risk Management Meeting. It monitors risk inherent to the financial services business, receives reports, determines action to be taken and reviews the efficiency of the risk management framework.

Day-to-day responsibility for risk management is delegated to senior management with individual accountability. These managers are supported by functions by the "Three lines of defence" model on risk management described under Operational Risk section.

A Product Oversight Committee reporting to the RMM and comprising senior executives from Risk, Legal, Compliance, Finance, and Operations/IT, is responsible for reviewing and approving the launch of such new products and services. Each new service and product launch is also subject to an operational risk self-assessment process, which includes identification, evaluation and mitigation of risk arising from the new initiative. Internal Audit is consulted on the internal control aspect of new products and services in development prior to implementation.

#### Risk management tools

The Group uses a range of tools to identify, monitor and manage risk. The key tools are summarised below.

##### *Risk appetite*

The Group's Risk Appetite Statement for 2016 was approved by the Board as advised by the Risk Committee, which sets out the types and amount of risk that is prepared to accept in achieving our medium and long-term strategic goals. It is integrated with other risk management tools such as stress testing, top and emerging risks report, to ensure consistency in risk management practices.

The RMM regularly reviews the Group's risk appetite profile against the limits set out in the Risk Appetite Statement on monthly basis to enable senior management to monitor the risk profile and guide business activities in order to balance risk and return. The risk appetite profile is also reported to the Risk Committee and Board from Chief Risk Officer including material deviation and related management mitigating actions.

##### *Risk map*

The group uses a risk map to provide a point-in-time view of its risk profile across a suite of risk categories, including our material banking risks and insurance risks. This highlights the potential for these risks to materially affect our financial results, reputation or business sustainability on current and projected bases.

The risks presented on the risk map are regularly assessed through our risk appetite profile, are stress tested and, where thematic issues arise, are considered for classification as top or emerging risks.

##### *Top and emerging risk*

The Group uses a top and emerging risks analysis process to provide a forward-looking view of issues that have the potential to threaten the execution of our strategy or operations over the medium to long term.

Top risk is defined as a risk which has arisen across any number of risk categories, regions or global businesses which has the potential to have a material impact on the financial results, reputation or long term business model to the Group, and which may form and crystallise between a 6 month and one year horizon. The risk impact may be well understood by senior management, with some mitigating actions already in place. Stress tests of varying granularity may also have been carried out to assess impact.

An emerging risk is defined as a risk which has large unknown components, which may form and crystallise beyond a one year horizon. If these risks were to materialise, they could have a material impact on the Group's long term strategy, affect profitability and damage the Group's reputation. Existing management action plans are likely to be minimal, reflecting the uncertain nature of these risks. Some high-level analysis or stress testing may have been carried out to try to assess and quantify impact.

## Management Discussion and Analysis (continued)

### Risk Management (continued)

#### Stress Testing

Stress testing and scenario analysis programme examines the sensitivities and resilience of our capital plan under adverse macroeconomic events to assess the sensitivities and resilience of capital adequacy. Action plans are developed to mitigate identified risks where needed. Reverse stress testing is conducted on Group level and is used to strengthen our resilience by identifying potential stresses and vulnerabilities which the Group might face and helping to inform early-warning triggers and design contingency plan to mitigate their effect were they to occur.

#### Independent risk function

The group's Risk function, headed by the group's Chief Risk Officer, is responsible for enterprise-wide risk oversight. This includes establishing and monitoring of risk profiles and forward-looking risk identification and management. The group's Risk function is made up of sub-functions covering all risks to our operations and forms part of the second line of defence. They are independent from the sales and trading functions, ensuring the necessary balance in risk/return decisions.

#### Description of risks - banking operations

(audited)

Risks	Arising from	Measurement, monitoring and management of risk
<b>Credit risk</b>		
The risk of financial loss if a customer or counterparty fails to meet an obligation under a contract.	Credit risk arises principally from direct lending, trade finance and leasing business, but also from certain other products such as guarantees and derivatives.	<p>Credit risk:</p> <ul style="list-style-type: none"> <li>- is measured as the amount which could be lost if a customer or counterparty fails to make repayments;</li> <li>- is monitored within limits, approved by individuals within a framework of delegated authorities; and</li> <li>- is managed through a robust risk control framework which outlines clear and consistent policies, principles and guidance for risk managers.</li> </ul>
<b>Liquidity and funding risk</b>		
The risk that the Group does not have sufficient financial resources to meet its obligations as they fall due or that it can only do so at excessive cost.	<p>Liquidity risk arises from mismatches in the timing of cash flows.</p> <p>Funding risk arises when the liquidity needed to fund illiquid asset positions cannot be obtained at the expected terms and when required.</p>	<p>Liquidity and funding risk:</p> <ul style="list-style-type: none"> <li>- is measured using a range of different metrics including liquidity coverage ratio and net stable funding ratio;</li> <li>- is monitored against the Group's liquidity and funding risk framework and overseen by the Group's ALCO and the RMM; and</li> <li>- is managed on a standalone basis with no reliance on any Group entity (unless pre-committed) or central bank unless this represents routine established business as usual market practice.</li> </ul>
<b>Market risk</b>		
The risk that movements in market factors, including foreign exchange rates and commodity prices, interest rates, credit spreads and equity prices, will reduce our income or the value of our portfolios.	<p>Exposure to market risk is separated into two portfolios:</p> <ul style="list-style-type: none"> <li>- Trading portfolios comprise positions arising from market-making and warehousing of customer derived positions.</li> <li>- Non-trading portfolios comprise positions that primarily arise from the interest rate management of our retail and commercial banking assets and liabilities, and financial investments designated as available-for-sale.</li> </ul>	<p>Market risk:</p> <ul style="list-style-type: none"> <li>- is measured in terms of value at risk ("VAR"), which is used to estimate potential losses on risk positions over a specified time horizon for a given level of confidence. It is augmented with stress testing;</li> <li>- is monitored using VaR, stress testing and other measures including the sensitivity of net interest income and the sensitivity of structural foreign exchange; and</li> <li>- is managed using risk limits approved by the Group. These limits are allocated across business lines and to the Group's legal entities.</li> </ul>



## Management Discussion and Analysis (continued)

### Risk Management (continued)

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#### **Operational risk**

The risk to achieving our strategy or objectives as a result of inadequate or failed internal processes, people and systems or from external events.	Operational risk arises from day to day operations or external events, and is relevant to every aspect of our business.	Operational risk: <ul style="list-style-type: none"><li>- is measured using both the scenario analysis process and the risk and control assessment process, which assess the level of risk and effectiveness of controls;</li><li>- is monitored using key indicators and other internal control activities; and</li><li>- is primarily managed by business and functional managers. They identify and assess risks, implement controls to manage them and monitor the effectiveness of these controls utilising the operational risk management framework.</li></ul>
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#### **Regulatory compliance risk**

The risk that we fail to observe the letter and spirit of all relevant laws, codes, rules, regulations and standards of good market practice, and incur fines and penalties and suffer damage to our business as a consequence.	Regulatory compliance risk is part of Operational Risk and arises from the provision of products and services to clients and counterparties.	Regulatory compliance risk: <ul style="list-style-type: none"><li>- is measured by reference to identified metrics, incident assessments, regulatory feedback and the judgement and assessment of our Regulatory Compliance teams;</li><li>- is monitored against our compliance risk assessments and metrics, the results of the monitoring and control activities of the second line of defence functions, , and the results of internal and external audits and regulatory inspections; and</li><li>- is managed by establishing and communicating appropriate policies and procedures, training employees in them, and monitoring activity to assure their observance. Proactive risk control and/or remediation work is undertaken where required.</li></ul>
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#### **Financial crime compliance risk**

The risk that we knowingly or unknowingly help parties to commit or to further potentially illegal activity through the Group.	Financial crime compliance risk is part of Operational Risk and arises from day to day banking operations.	Financial crime compliance risk: <ul style="list-style-type: none"><li>- is measured by reference to identified metrics, incident assessments, regulatory feedback and the judgement and assessment of our Financial Crime Compliance teams;</li><li>- is monitored results of the monitoring and control activities of the second line of defence functions, and the results of internal and external audits and regulatory inspections; and</li><li>- is managed by establishing and communicating appropriate policies and procedures, training employees in them, and monitoring activity to assure their observance. Proactive risk control and/or remediation work is undertaken where required.</li></ul>
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#### **Other material risks**

##### **Reputational risk**

The risk of failure to meet stakeholder expectations as a result of any event, behaviour, action or inaction, either by the Group itself, our employees or those with whom we are associated, that might cause stakeholders to form a negative view of the Group.	Primary reputational risks arise directly from an action or inaction by the Group, its employees or associated parties that are not the consequence of another type of risk. Secondary reputational risks are those arising indirectly and are a result of a failure to control any other risks.	Reputational risk: <ul style="list-style-type: none"><li>- is measured by reference to our reputation as indicated by our dealings with all relevant stakeholders, including media, regulators, customers and employees;</li><li>- is monitored through a reputational risk management framework, taking into account the results of the compliance risk monitoring activity; and</li><li>- is managed by every member of staff and is covered by a number of policies and guidelines. There is a clear structure of committees and individuals charged with mitigating reputational risk.</li></ul>
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## Management Discussion and Analysis (continued)

### Risk Management (continued)

Risks	Arising from	Measurement, monitoring and management of risk
<b>Pension risk</b>		
The risk that the performance of assets held in pension funds is insufficient to cover existing pension liabilities resulting in an increase in obligation to support the plan.	Pension risk arises from investments delivering an inadequate return, adverse changes in interest rates or inflation, or members living longer than expected (longevity risk). Pension risk includes operational risks listed above.	<p>Pension risk:</p> <ul style="list-style-type: none"> <li>- is measured in terms of the schemes' ability to generate sufficient funds to meet the cost of their accrued benefits;</li> <li>- is monitored through the specific risk appetite that has been developed at Group level; and</li> <li>- is managed locally through the appropriate pension risk governance structure.</li> </ul>

<b>Sustainability risk</b>		
The risk that financial services provided to customers by the Group indirectly result in unacceptable impacts on people or on the environment.	Sustainability risk arises from the provision of financial services to companies or projects which indirectly result in unacceptable impacts on people or on the environment.	<p>Sustainability risk:</p> <ul style="list-style-type: none"> <li>- is measured by assessing the potential sustainability effect of a customer's activities and assigning a Sustainability Risk Rating to all high risk transactions;</li> <li>- is managed using sustainability risk policies covering project finance lending and sector-based sustainability policies for sectors and themes with potentially high environmental or social impacts.</li> </ul>

Our insurance manufacturing subsidiary is separately regulated from our banking operations. Risks in the insurance entities are managed using methodologies and processes appropriate and subject to oversight at Group level. Our insurance operations are also subject to the operational and other material risks presented in relation to the banking operations, and these are covered by the Group's risk management processes.

#### Description of risks – insurance manufacturing operations

Risks	Arising from	Measurement, monitoring and management of risk
<b>Insurance risk</b>		
The risk that, over time, the cost of acquiring and administering an insurance contract, and paying claims and benefits may exceed the aggregate amount of premiums received and investment income.	The cost of claims and benefits can be influenced by many factors, including mortality and morbidity experience, lapse and surrender rates and, if the policy has a savings element, the performance of the assets held to support the liabilities.	<p>Insurance risk:</p> <ul style="list-style-type: none"> <li>- is measured in terms of life insurance liabilities;</li> <li>- is monitored by the RMM of the Insurance operations, which checks risk profile against the risk appetite for insurance business; and</li> <li>- is managed both centrally and locally using product design, underwriting, reinsurance and claims-handling procedures.</li> </ul>

<b>Financial risks</b>		
Our ability to effectively match the liabilities arising under insurance contracts with the asset portfolios that back them are contingent on the management of financial risks such as market, credit and liquidity risks, and the extent to which these risks are not borne by the policyholders.	<p>Exposure to financial risks arises from:</p> <ul style="list-style-type: none"> <li>- market risk of changes in the fair values of financial assets or their future cash flows from fluctuations in variables such as interest rates, foreign exchange rates and equity prices;</li> <li>- credit risk and the potential for financial loss following the default of third parties in meeting their obligations; and</li> <li>- liquidity risk of entities not being able to make payments to policyholders as they fall due as there are insufficient assets that can be realised as cash within the required timeframe.</li> </ul>	<p>Financial risks:</p> <ul style="list-style-type: none"> <li>- are measured separately for each type of risk: <ul style="list-style-type: none"> <li>- market risks are measured in terms of exposure to fluctuations in key financial variables;</li> <li>- credit risk is measured as the amount which could be lost if counterparty fails to make required payments; and</li> <li>- liquidity risk is measured using internal metrics including stressed operational cash flow projections;</li> </ul> </li> <li>- are monitored within limits approved by individuals within a framework of delegated authorities;</li> <li>- are managed through a robust risk control framework which outlines clear and consistent policies, principles and guidance for risk managers. Subsidiary manufacturing products with guarantees are usually exposed to falls in market interest rates and equity prices to the extent that the market exposure cannot be managed by utilising any discretionary participation (or bonus) features within the policy contracts they issue; and</li> <li>- can be mitigated through sharing of risk with policyholders under the discretionary participation features for participating products.</li> </ul>
Contracts with discretionary participating feature share the performance of the underlying assets between policyholders and the shareholder in line with the type of contract and the specific contract terms.		

## Management Discussion and Analysis (continued)

### Risk Management (continued)

The following information described the Group's management and control of risks, in particular, those associated with its use of financial instruments ("financial risks"). Major types of risks to which the Group was exposed include credit risk, liquidity risk, market risk, insurance risk and operational risk.

#### (a) Credit Risk (audited)

Credit risk is the risk that financial loss arises from the failure of a customer or counterparty to meet its obligations under a contract. It arises principally from lending, trade finance, and treasury businesses. The Group has dedicated standards, policies and procedures in place to control and monitor risk from all such activities.

There are dedicated functions, reported to Chief Risk Officer, responsible for centralised management of credit risk through:

- formulating credit policies on approval process, post disbursement monitoring, recovery process and large exposure;
- issuing guidelines on lending to specified market sectors, industries and products; the acceptability of specific classes of collateral or risk mitigations and valuation parameters for collateral;
- undertaking an independent review and objective assessment of credit risk for all commercial non-bank credit facilities in excess of designated amount prior to the facilities being committed to customers;
- controlling exposures to selected industries, counterparties, countries and portfolio types etc by setting limits;
- maintaining and developing credit risk rating/facility grading process to categorise exposures and facilitate focused management;
- reporting to senior executives and various committees on aspects of the Group loan portfolio;
- managing and directing credit-related systems initiatives; and
- providing advice and guidance to business units on various credit-related issues.

#### Impaired loan management and recovery

The Group undertakes ongoing credit analysis and monitoring at several levels. Special attention is paid to problem loans. Loan impairment allowances are made promptly where necessary and need to be consistent with established guidelines. Recovery units are established by the Group to provide the customers with intensive support in order to maximise recoveries of doubtful debts. Management regularly performs an assessment of the adequacy of the established impairment provisions by conducting a detailed review of the loan portfolio, comparing performance and delinquency statistics against historical trends and undertaking an assessment of current economic conditions.

#### Risk rating framework

A risk rating framework on counterparty credit risk based on default probability and loss estimates is implemented across the Group. The rating methodology is based upon a wide range of financial analytics. This approach will allow a more granular analysis of risk and trends. The information generated from the risk rating framework is mainly, but not exclusively, applied to credit approval, credit monitoring, pricing, loan classification and capital adequacy assessment. The Group also has control mechanisms in place to validate the performance and accuracy of the risk rating framework.

To measure and manage the risk in these exposures, both to individually assessed customers and to those aggregated into portfolios, the Group employs diverse risk rating systems and methodologies.

#### Collateral and other credit enhancements

The Group has implemented guidelines on the acceptability of specific classes of collateral or credit risk mitigation, and determined the valuation parameters. Such parameters are established prudently and are reviewed regularly in light of changing market environment and empirical evidence. Security structures and legal covenants are subject to regular review to ensure that they continue to fulfil their intended purpose and remain in line with local market practice. While collateral is an important mitigant to credit risk, it is the Group's policy to establish that loans are within the customer's capacity to repay rather than to rely excessively on security. Facilities may be granted on unsecured basis depending on the customer's standing and the type of product. The principal collateral types are as follows:

- in the personal sector, charges over the properties, securities, investment funds and deposits;
- in the commercial and industrial sector, charges over business assets such as properties, stock, debtors, investment funds, deposits and machinery; and
- in the commercial real estate sector, charges over the properties being financed.

## Management Discussion and Analysis (continued)

### Risk Management (continued)

#### (a) Credit Risk (continued)

##### Collateral and other credit enhancements (continued)

Repossessed assets are non-financial assets acquired in exchange for loans in order to achieve an orderly realisation, and are reported in the balance sheet within "Other assets" at the lower of fair value (less costs to sell) and the carrying amount of the loan (net of any impairment allowance). If excess funds arise after the debt has been repaid, they are made available either to repay other secured lenders with lower priority or are returned to the customer. The Group does not generally occupy repossessed properties for its business use.

Collateral held as security for financial assets other than loans and advances is determined by the nature of the instrument. Debt securities, treasury and other eligible bills are generally unsecured.

##### Settlement risk

Settlement risk arises where a payment in cash, securities or equities is made in the expectation of a corresponding receipt in cash, securities or equities. Daily Settlement Limits are established to cover the settlement risk arising from the Group's trading transactions on any single day. Settlement risk on many transactions, particularly those involving securities and equities, is substantially mitigated when effected via assured payment systems, or on a delivery-versus-payment basis.

##### Concentration of credit risk

Concentration of credit risk exists when changes in geographic, economic or industry factors similarly affect groups of counterparties whose aggregate credit exposure is material in relation to the Group's total exposures. The Group's portfolio of financial instrument is diversified along geographic, industry and product sectors. Analysis of geographical concentration of the Group's assets is disclosed in note 23 to the financial statements and credit risk concentration of respective financial assets is disclosed in notes 28, 29, 31 and 32.

The below analysis shows the exposures to credit risk in accordance with HKFRS 7 "Financial Instruments: Disclosures".

#### (i) Maximum exposure to credit risk before collateral held or other credit enhancements (audited)

Our credit exposure is spread across a broad range of asset classes, including derivatives, trading assets, loans and advances to customers, loans and advances to banks and financial investments.

The following table presents the maximum exposure to credit risk from balance sheet and off-balance sheet financial instruments, before taking account of any collateral held or other credit enhancements (unless such credit enhancements meet accounting offsetting requirements). For financial assets recognised on the balance sheet, the maximum exposure to credit risk equals their carrying amount; for financial guarantees and similar contracts granted, it is the maximum amount that we would have to pay if the guarantees were called upon. For loan commitments and other credit-related commitments that are irrevocable over the life of the respective facilities, it is generally the full amount of the committed facilities.

	2016	2015 (restated)
Cash and sight balances at central banks	23,299	10,118
Placings with and advances to banks	103,460	123,990
Trading assets	44,411	40,352
Financial assets designated at fair value	369	1,136
Derivative financial instruments	16,695	11,595
Loans and advances to customers	698,992	688,946
Financial investments	393,836	367,630
Other assets	17,865	18,876
Financial guarantees and other credit related contingent liabilities	7,934	7,391
Loan commitments and other credit related commitments	493,726	514,631
	<u>1,800,587</u>	<u>1,784,665</u>

## **Management Discussion and Analysis** *(continued)*

### **Risk Management** *(continued)*

#### **(a) Credit Risk** *(continued)*

##### (ii) Collateral and other credit enhancements

#### **Loans and advances**

*(audited)*

Although collateral can be an important mitigant of credit risk, it is the Group's practice to lend on the basis of the customer's ability to meet their obligations out of their cash flow resources rather than rely on the value of security offered. Depending on the customer's standing and the type of product, facilities may be provided unsecured. However, for certain lending decisions a charge over collateral is usually obtained, and is important for the credit decision and pricing, and it is the Bank's practice to obtain that collateral and sell it in the event of default as a source of repayment. Such collateral has a significant financial effect and the objective of the disclosure below is to quantify these forms. We may also manage our risk by employing other types of collateral and credit risk enhancements, such as second charges, other liens and unsupported guarantees, but the valuation of such mitigants is less certain and their financial effect has not been quantified in the loans shown below.

We have quantified below the value of fixed charges we hold over a specific asset (or assets) of a borrower for which we have a practical ability and history of enforcing in satisfying a debt in the event of a borrower failing to meet their contractual obligations and where the asset is cash or can be realised in the form of cash by sale in an established market.

#### **Personal lending**

*(audited)*

For personal lending the collateral held has been analysed below separately for residential mortgages and other personal lending due to the different nature of collateral held on the portfolios.

## Management Discussion and Analysis (continued)

### Risk Management (continued)

#### (a) Credit Risk (continued)

##### **Residential mortgages** (audited)

The following table shows residential mortgage lending including off-balance sheet loan commitments by level of collateralisation.

##### *Residential mortgages*

	2016	2015
<u>Unimpaired loans</u>		
Uncollateralised	-	-
Fully collateralised	<b>205,325</b>	199,212
– Less than 50% LTV	<b>137,893</b>	133,748
– 51% to 60% LTV	<b>36,462</b>	32,514
– 61% to 70% LTV	<b>15,517</b>	20,959
– 71% to 80% LTV	<b>8,114</b>	6,858
– 81% to 90% LTV	<b>5,874</b>	2,790
– 91% to 100% LTV	<b>1,465</b>	2,343
Partially collateralised		
– Greater than 100% LTV (A)	<b>6</b>	220
– Collateral value on A	<b>5</b>	219
	<b>205,331</b>	199,432
<u>Impaired loans</u>		
Fully collateralised	<b>192</b>	218
– Less than 50% LTV	<b>140</b>	187
– 51% to 60% LTV	<b>23</b>	29
– 61% to 70% LTV	<b>11</b>	2
– 71% to 80% LTV	<b>4</b>	-
– 81% to 90% LTV	<b>8</b>	-
– 91% to 100% LTV	<b>6</b>	-
Uncollateralised	-	-
Total	<b>205,523</b>	199,650

The collateral included in the table above consists of fixed first charges on residential real estate.

The loan-to-value ("LTV") ratio in the table above is calculated as the gross on-balance sheet carrying amount of the loan and any off-balance sheet loan commitment at the balance sheet date as a percentage of the current value of collateral. The current value of collateral is determined through a combination of professional valuations, physical inspections or house price indices. The collateral valuation excludes any adjustments for obtaining and selling the collateral.

##### **Other personal lending** (audited)

The remainder of our personal lending consists primarily of credit cards, instalment loan, overdraft or revolving loan. Credit cards are generally unsecured. Instalment loan, overdraft and revolving loan could be partially secured by cash or marketable securities.

## Management Discussion and Analysis (continued)

### Risk Management (continued)

#### (a) Credit Risk (continued)

##### Corporate and commercial and financial (non-bank) lending (audited)

For corporate and commercial and financial (non-bank) lending, the collateral held has been analysed below separately for commercial real estate and other corporate and commercial and financial (non-bank) lending due to the different nature of collateral held on the portfolios.

##### Commercial real estate (audited)

The following table shows commercial real estate lending including off-balance sheet loan commitments by level of collateralisation.

##### Commercial real estate loans and advances

	2016	2015
Rated - CRR/EL* 1 to 7	<b>93,820</b>	95,281
Uncollateralised	<b>16,957</b>	14,419
Fully collateralised	<b>73,681</b>	76,555
Partially collateralised (A)	<b>3,182</b>	4,307
- Collateral value on A	<b>1,837</b>	2,930
	<b>93,820</b>	95,281
Rated CRR/EL 8		
Uncollateralised	-	-
Fully collateralised	<b>2</b>	27
- Less than 25% LTV	<b>2</b>	2
- 25% to 50% LTV	-	2
- 51% to 75% LTV	-	23
- 76% to 90% LTV	-	-
- 91% to 100% LTV	-	-
Partially collateralised (B)	-	4
- Collateral value on B	-	1
	<b>2</b>	31
Rated CRR/EL 9 to 10		
Uncollateralised	-	1
Fully collateralised	<b>27</b>	44
- Less than 25% LTV	<b>9</b>	29
- 25% to 50% LTV	<b>1</b>	7
- 51% to 75% LTV	<b>8</b>	8
- 76% to 90% LTV	<b>9</b>	-
- 91% to 100% LTV	-	-
Partially collateralised (C)	<b>9</b>	5
- Collateral value on C	<b>3</b>	4
	<b>36</b>	50
Total	<b>93,858</b>	95,362

\* For details of CRR/EL, please refer to section (iii) Credit Quality.

The collateral included in the table above consists of fixed first charges on real estate and charges over cash for the commercial real estate sector. The table includes lending to major property developers which is typically secured by guarantees or is unsecured.

The value of commercial real estate collateral is determined through a combination of professional and internal valuations and physical inspection. Due to the complexity of collateral valuations for commercial real estate, local valuation policies determine the frequency of review based on local market conditions. Revaluations are sought with greater frequency where, as part of the regular credit assessment of the obligor, material concerns arise in relation to the transaction which may reflect on the underlying performance of the collateral, or in circumstances where an obligor's credit quality has declined sufficiently to cause concern that the principal payment source may not fully meet the obligation (i.e. the obligor's credit quality classification indicates it is at the lower end e.g. sub-standard, or approaching impaired).

## Management Discussion and Analysis (continued)

### Risk Management (continued)

#### (a) Credit Risk (continued)

##### *Other corporate and commercial and financial (non-bank) lending (audited)*

The following table shows corporate, commercial and financial (non-bank) lending rated CRR/EL 8 to 10 only including off-balance sheet loan commitments by level of collateralisation.

##### *Corporate, commercial and financial (non-bank) loans and advances*

	2016	2015
Rated CRR/EL 8		
Uncollateralised	16	37
Fully collateralised	10	127
– Less than 25% LTV	9	13
– 25% to 50% LTV	-	88
– 51% to 75% LTV	1	26
– 76% to 90% LTV	-	-
– 91% to 100% LTV	-	-
Partially collateralised (A)	89	247
– Collateral value on A	19	85
	<b>115</b>	<b>411</b>
Rated CRR/EL 9 to 10		
Uncollateralised	1,156	746
Fully collateralised	847	860
– Less than 25% LTV	118	68
– 25% to 50% LTV	192	143
– 51% to 75% LTV	85	397
– 76% to 90% LTV	375	177
– 91% to 100% LTV	77	75
Partially collateralised (B)	725	687
– Collateral value on B	460	557
	<b>2,728</b>	<b>2,293</b>
Total	<b>2,843</b>	<b>2,704</b>

The collateral used in the assessment of the above primarily includes first legal charges over real estate and charges over cash in the commercial and industrial sector and charges over cash and marketable financial instruments in the financial sector. Government sector lending is typically unsecured.

It should be noted that the table above excludes other types of collateral which are commonly taken for corporate and commercial lending such as unsupported guarantees and floating charges over the assets of a customer's business. While such mitigants have value, often providing rights in insolvency, their assignable value is insufficiently certain. They are assigned no value for disclosure purposes.

As with commercial real estate the value of real estate collateral included in the table above is generally determined through a combination of professional and internal valuations and physical inspection. The frequency of revaluation is undertaken on a similar basis to commercial real estate loans and advances; however, for financing activities in corporate and commercial lending that are not predominantly commercial real estate-oriented, collateral value is not as strongly correlated to principal repayment performance. Collateral values will generally be refreshed when an obligor's general credit performance deteriorates and it is necessary to assess the likely performance of secondary sources of repayment should reliance upon them prove necessary. For this reason, the table above reports values only for customers with CRR 8 to 10, reflecting that these loans and advances generally have valuations which are of comparatively recent vintage. For the purposes of the table above, cash is valued at its nominal value and marketable securities at their fair value.



## Management Discussion and Analysis (continued)

### Risk Management (continued)

#### (a) Credit Risk (continued)

##### Loans and advances to banks (audited)

The following table shows loans and advances to banks including off-balance sheet loan commitments by level of collateralisation.

##### Loans and advances to banks

	2016	2015
Rated CRR/EL 1 to 8		
Uncollateralised	103,460	123,990
Fully collateralised	-	-
Partially collateralised (A)	-	-
– Collateral value on A	-	-
	<u>103,460</u>	<u>123,990</u>
Rated CRR/EL 9 to 10		
Uncollateralised	-	-
Fully collateralised	-	-
Partially collateralised (B)	-	-
– Collateral value on B	-	-
	<u>-</u>	<u>-</u>
	<u>-</u>	<u>-</u>
Total loans and advances to banks	<u><u>103,460</u></u>	<u><u>123,990</u></u>

##### Derivatives

(audited)

The International Swaps and Derivatives Association ("ISDA") Master Agreement is our preferred agreement for documenting derivatives activity. It provides the contractual framework within which dealing activity across a full range of over the counter ("OTC") products is conducted, and contractually binds both parties to apply close-out netting across all outstanding transactions covered by an agreement if either party defaults or another pre-agreed termination event occurs. It is common, and the Group's preferred practice, for the parties to execute a Credit Support Annex ("CSA") in conjunction with the ISDA Master Agreement. Under a CSA, collateral is passed between the parties to mitigate the counterparty risk inherent in outstanding positions. The majority of our CSAs are with financial institutional clients.

## Management Discussion and Analysis (continued)

### Risk Management (continued)

#### (a) Credit Risk (continued)

##### Other credit risk exposures

(audited)

In addition to collateralised lending described above, other credit enhancements are employed and methods used to mitigate credit risk arising from financial assets. These are described in more detail below.

Government, bank and other financial institution issued securities may benefit from additional credit enhancement, notably through government guarantees that reference these assets. Corporate issued debt securities are primarily unsecured. Debt securities issued by banks and financial institutions include covered bonds, which are supported by underlying pools of financial assets.

Trading assets include loans and advances held with trading intent, the majority of which consist of reverse repos and securities borrowing which by their nature are collateralised. Collateral accepted as security that the Group is permitted to sell or repledge under these arrangements is described in Note 33 "Assets transferred, assets charged as security for liabilities, and collateral accepted as security for assets".

The Group's maximum exposure to credit risk includes financial guarantees and similar arrangements that it issues or enters into, and loan commitments to which it is irrevocably committed. Depending on the terms of the arrangement, the Bank may have recourse to additional credit mitigation in the event that a guarantee is called upon or a loan commitment is drawn and subsequently defaults. The risks and exposures from these are captured and managed in accordance with the Group's overall credit risk management policies and procedures.

Collateral and other credit enhancements obtained

(audited)

The Group obtained assets by taking possession of collateral held as security, or calling other credit enhancement.

The carrying amount outstanding as at the year end was as follows:

	<b>2016</b>	2015
Nature of assets:		
Residential properties	<b>23</b>	30
Commercial and industrial properties	<b>1</b>	3
Other	-	-
	<u><b>24</b></u>	<u>33</u>

## Management Discussion and Analysis (continued)

### Risk Management (continued)

#### (a) Credit Risk (continued)

##### (iii) Credit quality (audited)

Five broad classifications describe the credit quality of the Group's lending and debt securities portfolios. These classifications each encompass a range of more granular, internal credit rating grades assigned to wholesale and retail lending business, as well as the external ratings attributed by external agencies to debt securities.

There is no direct correlation between the internal and external ratings at granular level, except insofar as both fall within one of the five classifications.

(unaudited)

Quality classification	Wholesale lending and derivatives internal credit rating	12 month probability of default %	Retail lending internal credit rating	Expected loss %	Debt securities/other external credit rating
Strong	CRR 1 to CRR 2	0-0.169	EL 1 to EL 2*	0-0.999	A- and above
Good	CRR 3	0.170-0.740	EL 3*	1.000-4.999	BBB+ to BBB-
Satisfactory	CRR 4 to CRR 5	0.741-4.914	EL 4 to EL 5*	5.000-19.999	BB+ to B and unrated
Sub-standard	CRR 6 to CRR 8	4.915-99.999	EL 6 to EL 8*	20.000-99.999	B- to C
Impaired	CRR 9 to CRR 10	100	EL 9 to EL 10* and all EL 1 to EL 8 exposures past due 90 days and above	100+ or defaulted	Individually identified

\* All retail exposures past due 90 days and above are classified as "impaired". The EL percentage is derived through a combination of PD and LGD, and may exceed 100% in circumstances where the LGD is above 100% reflecting the cost recoveries.

#### Quality classification definitions:

(audited)

- Strong: Exposures demonstrate a strong capacity to meet financial commitments, with negligible or low probability of default and/or low levels of expected loss. Retail accounts operate within product parameters and only exceptionally show any period of delinquency.

- Good: Exposures require closer monitoring and demonstrate a good capacity to meet financial commitments, with low default risk. Retail accounts typically show only short periods of delinquency, with any losses expected to be minimal following the adoption of recovery processes.

- Satisfactory: Exposures require closer monitoring and demonstrate an average to fair capacity to meet financial commitments, with moderate default risk. Retail accounts typically show only short periods of delinquency, with losses expected to be minor following the adoption of recovery process.

- Sub-standard: Exposures require varying degrees of special attention and default risk of greater concern. Retail accounts show longer delinquency periods of generally up to 90 days past due and/or expected losses are higher due to a reduced ability to mitigate through security realisation or other recovery processes.

- Impaired: Exposures have been assessed, individually or collectively, as impaired. The Group observes the conservative disclosure convention, reflected in the quality classification definitions above, that all retail accounts delinquent by 90 days or more are considered impaired. Such accounts may occur in any retail expected loss ("EL") grade, whereby in the higher quality grades the grading assignment will reflect the offsetting of the impact of delinquency status by credit risk mitigation in one form or another.

The Group's policy in respect of impairment on loans and advances and debt securities is set out in note 3 on the financial statements. Analysis of impairment allowances as at 31 December 2016 and the movement of such allowances during the year are disclosed in note 31.

## Management Discussion and Analysis (continued)

### Risk Management (continued)

#### (a) Credit Risk (continued)

##### (iii) Credit quality (audited)

##### **Granular risk rating scales:** (unaudited)

The customer risk rating ("CRR") 10-grade scale summarises to a more granular underlying 23-grade scale of obligor probability of default. The Group's wholesale customers are rated using the 10 or 23-grade scale, depending on which regulatory approach is adopted for the assets in question. The expected loss ("EL") 10-grade scale for retail business summarises a more granular scale combining obligor and facility/product risk factors in a composite measure, used Group-wide. The external ratings cited above have for clarity of reporting been assigned to the quality classifications defined for internally-rated exposures, although there is no fixed correlation between internal and external ratings.

Impairment is not measured for financial investments held in trading portfolios or designated at fair value, as assets in such portfolios are managed according to movements in fair value, and the fair value movement is taken directly through the income statement. Consequently, all such balances are reported under "neither past due nor impaired".

##### **Distribution of financial instruments by credit quality** (audited)

	Neither past due nor impaired				Past due but not impaired	Impaired	Impairment allowances	Total
	Strong	Good*	Satisfactory	Sub-standard				
<b>2016</b>								
Items in the course of collection from other banks	5,303	-	1,051	-	-	-	-	6,354
Trading assets:								
- treasury and eligible bills	27,733	-	-	-	-	-	-	27,733
- debt securities	10,880	-	-	-	-	-	-	10,880
- loans and advances to banks	264	5,497	-	-	-	-	-	5,761
- loans and advances to customers	37	-	-	-	-	-	-	37
	<u>38,914</u>	<u>5,497</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>44,411</u>
Financial assets designated at fair value:								
- treasury and eligible bills	-	-	-	-	-	-	-	-
- debt securities	367	-	2	-	-	-	-	369
	<u>367</u>	<u>-</u>	<u>2</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>369</u>
Derivatives	13,690	1,824	1,061	120	-	-	-	16,695
Loans and advances held at amortised cost:								
- sight balances at central banks	15,681	-	-	-	-	-	-	15,681
- placings with and advances to banks	99,154	3,702	604	-	-	-	-	103,460
- loans and advances to customers	318,490	201,806	168,088	4,921	4,311	3,235	(1,859)	698,992
	<u>433,325</u>	<u>205,508</u>	<u>168,692</u>	<u>4,921</u>	<u>4,311</u>	<u>3,235</u>	<u>(1,859)</u>	<u>818,133</u>
Financial investments:								
- treasury and similar bills	180,951	-	-	-	-	-	-	180,951
- debt securities	203,365	7,449	2,071	-	-	-	-	212,885
	<u>384,316</u>	<u>7,449</u>	<u>2,071</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>393,836</u>
Other assets:								
- acceptances and endorsements	467	1,813	2,573	439	-	-	-	5,292
- other	2,570	389	3,174	10	76	-	-	6,219
	<u>3,037</u>	<u>2,202</u>	<u>5,747</u>	<u>449</u>	<u>76</u>	<u>-</u>	<u>-</u>	<u>11,511</u>

## Management Discussion and Analysis (continued)

### Risk Management (continued)

#### (a) Credit Risk (continued)

	Neither past due nor impaired				Past due but not impaired	Impaired	Impairment allowances	Total
	Strong	Good*	Satisfactory	Sub- standard				
2015								
Items in the course of collection from other banks	6,235	-	687	-	-	-	-	6,922
Trading assets:								
- treasury and eligible bills	21,405	-	-	-	-	-	-	21,405
- debt securities	15,025	-	1,650	-	-	-	-	16,675
- loans and advances to banks	266	2,000	-	-	-	-	-	2,266
- loans and advances to customers	6	-	-	-	-	-	-	6
	<u>36,702</u>	<u>2,000</u>	<u>1,650</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>40,352</u>
Financial assets designated at fair value:								
- treasury and eligible bills	1,070	-	-	-	-	-	-	1,070
- debt securities	64	2	-	-	-	-	-	66
	<u>1,134</u>	<u>2</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>1,136</u>
Derivatives	7,681	1,196	2,551	167	-	-	-	11,595
Loans and advances held at amortised cost:								
- sight balances at central banks	4,859	-	-	-	-	-	-	4,859
- placings with and advances to banks	119,423	4,063	504	-	-	-	-	123,990
- loans and advances to customers	328,419	202,971	147,684	3,848	4,902	2,737	(1,615)	688,946
	<u>452,701</u>	<u>207,034</u>	<u>148,188</u>	<u>3,848</u>	<u>4,902</u>	<u>2,737</u>	<u>(1,615)</u>	<u>817,795</u>
Financial investments:								
- treasury and similar bills	152,014	-	-	-	-	-	-	152,014
- debt securities	205,068	7,907	2,641	-	-	-	-	215,616
	<u>357,082</u>	<u>7,907</u>	<u>2,641</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>367,630</u>
Other assets:								
- acceptances and endorsements	827	2,448	2,446	3	-	-	-	5,724
- other	2,499	565	3,110	8	48	-	-	6,230
	<u>3,326</u>	<u>3,013</u>	<u>5,556</u>	<u>11</u>	<u>48</u>	<u>-</u>	<u>-</u>	<u>11,954</u>

\* Includes HK\$7,447million (2015: HK\$8,241 million) of debt securities that have been classified as BBB- to BBB+ for the Group in 2016, based on Standard and Poor's ratings or their equivalent to the respective issues of the financial securities. If major rating agencies have different ratings for the same debt securities, the securities are reported against the lower rating. In the absence of such issue ratings, the ratings designated for the issuers are reported.

## Management Discussion and Analysis (continued)

### Risk Management (continued)

#### (a) Credit Risk (continued)

##### *Aging analysis of financial instruments which were past due but not impaired (audited)*

Examples of exposures designated past due but not impaired include loans that have missed the most recent payment date but on which there is no evidence of impairment; loans fully secured by cash collateral; short-term trade facilities past due more than 90 days for technical reasons such as delays in documentation, but where there is no concern over the creditworthiness of the counterparty.

	Up to 29 days	30- 59 days	60- 89 days	90- 180 days	Over 180 days	Total
<b>2016</b>						
Items in the course of collection from other banks	-	-	-	-	-	-
Trading assets:						
- treasury and eligible bills	-	-	-	-	-	-
- debt securities	-	-	-	-	-	-
- loans and advances to banks	-	-	-	-	-	-
- loans and advances to customers	-	-	-	-	-	-
	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>
Financial assets designated at fair value:						
- treasury and eligible bills	-	-	-	-	-	-
- debt securities	-	-	-	-	-	-
	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>
Derivatives	-	-	-	-	-	-
Loans and advances held at amortised cost:						
- sight balances at central banks	-	-	-	-	-	-
- placings with and advances to banks	-	-	-	-	-	-
- loans and advances to customers <sup>#</sup>	3,766	405	140	-	-	4,311
	<u>3,766</u>	<u>405</u>	<u>140</u>	<u>-</u>	<u>-</u>	<u>4,311</u>
Financial investments:						
- treasury and similar bills	-	-	-	-	-	-
- debt securities	-	-	-	-	-	-
	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>
Other assets:						
- acceptances and endorsements	-	-	-	-	-	-
- other	31	12	6	11	16	76
	<u>31</u>	<u>12</u>	<u>6</u>	<u>11</u>	<u>16</u>	<u>76</u>

**Management Discussion and Analysis** (continued)

**Risk Management** (continued)

(a) **Credit Risk** (continued)

	Up to 29 days	30- 59 days	60- 89 days	90- 180 days	Over 180 days	Total
2015						
Items in the course of collection from other banks	-	-	-	-	-	-
Trading assets:						
- treasury and eligible bills	-	-	-	-	-	-
- debt securities	-	-	-	-	-	-
- loans and advances to banks	-	-	-	-	-	-
- loans and advances to customers	-	-	-	-	-	-
	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>
Financial assets designated at fair value:						
- treasury and eligible bills	-	-	-	-	-	-
- debt securities	-	-	-	-	-	-
	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>
Derivatives	-	-	-	-	-	-
Loans and advances held at amortised cost:						
- sight balances at central banks	-	-	-	-	-	-
- placings with and advances to banks	-	-	-	-	-	-
- loans and advances to customers <sup>#</sup>	4,338	388	176	-	-	4,902
	<u>4,338</u>	<u>388</u>	<u>176</u>	<u>-</u>	<u>-</u>	<u>4,902</u>
Financial investments:						
- treasury and similar bills	-	-	-	-	-	-
- debt securities	-	-	-	-	-	-
	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>
Other assets:						
- acceptances and endorsements	-	-	-	-	-	-
- other	19	6	11	10	2	48
	<u>19</u>	<u>6</u>	<u>11</u>	<u>10</u>	<u>2</u>	<u>48</u>

<sup>#</sup>The majority of the loans and advances to customers that are operating within revised terms following restructuring are excluded from this table.

## Management Discussion and Analysis (continued)

### Risk Management (continued)

#### (a) Credit Risk (continued)

##### *Impaired loans and advances (audited)*

The Group's policy for recognising and measuring impairment allowances on both individually assessed advances and those which are collectively assessed on a portfolio basis is described in note 3(e) to the financial statements.

Analysis of impairment allowances at 31 December 2016 and the movement of such allowances during the year are disclosed in note 31 to the financial statements.

Impaired loans and advances are those that meet any of the following criteria:

- wholesale loans and advances classified as CRR 9 or CRR 10. These grades are assigned when the bank considers that either the customer is unlikely to pay its credit obligations in full, without recourse to security, or when the customer is past due 90 days or more on any material credit obligation to the Group;
- retail loans and advances:
  - classified as EL 9 or EL 10; or
  - classified as EL 1 to EL 8 with 90 days and over past due; or
  - that have been with either 90 days and over past due or with economic loss incurred by the Group irrespective of the delinquency status.
- renegotiated loans and advances that have been subject to a change in contractual cash flows as a result of a concession which the lender would not otherwise consider, and where it is probable that without the concession the borrower would be unable to meet its contractual payment obligations in full, unless the concession is insignificant and there are no other indicators of impairment. Renegotiated loans remain classified as impaired until there is sufficient evidence to demonstrate a significant reduction in the risk of non-payment of future cash flows, and there are no other indicators of impairment. For loans that are assessed for impairment on a collective basis, the evidence to support reclassification as no longer impaired typically comprises a history of payment performance against the original or revised terms, depending on the nature and volume of renegotiation and the credit risk characteristics surrounding the renegotiation. For loans that are assessed for impairment on an individual basis, all available evidence is assessed on a case by case basis.



## Management Discussion and Analysis (continued)

### Risk Management (continued)

#### (a) Credit Risk (continued)

##### **Impairment assessment** (audited)

It is Group's policy that each operating company in the Group creates impairment allowances for impaired loans promptly and appropriately.

For details of our impairment policies on loans and advances and financial investments, see notes 3(e) and 3(k) to the financial statements.

##### **Impairment and credit risk mitigation**

The existence of collateral has an impact when calculating impairment on individually assessed impaired loans. When we no longer expect to recover the principal and interest due on a loan in full or in accordance with the original terms and conditions, it is assessed for impairment. If exposures are secured, the current net realisable value of the collateral will be taken into account when assessing the need for an impairment allowance. No impairment allowance is recognised in cases where all amounts due are expected to be settled in full on realisation of the security.

Personal lending portfolios are generally assessed for impairment on a collective basis as the portfolios typically consist of large groups of homogeneous loans. Two methods are used to calculate allowances on a collective basis: a roll-rate methodology or a more basic formulaic approach based on historical losses.

The historical loss methodology is typically used to calculate collective impairment allowances for secured, or low default portfolios such as mortgages, until the point at which they are individually identified and assessed as impaired. For loans which are collectively assessed using historical loss methodology, the historical loss rate is derived from the average contractual write-off net of recoveries over a defined period. The net contractual write-off rate is the actual amount of loss experienced after the realisation of collateral and receipt of recoveries.

A roll-rate methodology is more commonly adopted for unsecured portfolios when there are sufficient volumes of empirical data to develop robust statistical models.

The nature of the collective allowance assessment prevents individual collateral values or LTV ratios from being included within the calculation. However, the loss rates used in the collective assessment are adjusted for the collateral realisation experiences which will vary depending on the LTV composition of the portfolio.

For wholesale loans and secured personal lending that calculating impairment on individually assessed impaired loans, historical loss methodologies are applied to estimate impairment losses which have been incurred but not reported. Loss rates are derived from the observed contractual write-off net of recoveries over a defined period of at least 60 months. The net contractual write-off rate is the actual amount of loss experienced after realisation of collateral and receipt of recoveries. These historical loss rates are adjusted by an economic factor which adjusts the historical averages to better represent current economic conditions affecting the portfolio. In order to reflect the likelihood of a loss event not being identified and assessed an emergence period assumption is applied. This reflects the period between a loss occurring and its identification. The emergence period is estimated by local management for each identified portfolio. The factors that may influence this estimation include economic and market conditions, customer behaviour, portfolio management information, credit management techniques and collection and recovery experiences in the market. A fixed range for the period between a loss occurring and its identification is not defined across the Group and as it is assessed empirically on a periodic basis, it may vary over time as these factors change.

## Management Discussion and Analysis (continued)

### Risk Management (continued)

#### (b) Liquidity and funding risk (audited)

The purpose of liquidity and funding management is to ensure sufficient cash flows to meet all financial commitment and to capitalise on opportunities for business expansion. This includes the Group's ability to meet deposit withdrawals either on demand or at contractual maturity, to repay borrowings as they mature, to comply with the statutory liquidity ratio, and to make new loans and investments as opportunities arise. The Group maintains a stable and diversified funding base of core retail and corporate customer deposits as well as portfolios of highly liquid assets.

As part of our Asset, Liability and Capital Management structure, we have established Asset and Liability Management Committee ("ALCO") at Group level and in major operating entities. The terms of reference of all ALCOs include the monitoring and control of liquidity and funding. Management of liquidity is carried out both at Group and Bank levels as well as in individual branches and subsidiaries. The Group requires branches and subsidiaries to maintain a strong liquidity position and to manage the liquidity structure of their assets, liabilities and commitments so that cash flows are approximately balanced and all funding obligations are met when due.

It is the responsibility of the Group's management to ensure compliance with local regulatory requirements and limits set by ALCO. Liquidity is managed on a daily basis by the Bank's treasury functions and overseas treasury sites.

The Board is ultimately responsible for determining the types and magnitude of liquidity risk that the Group is able to take and ensure that there is an appropriate organisation structure for managing this risk. Under authorities delegated by the Executive Committee, the Group ALCO is responsible for managing all Asset, Liability and Capital Management issues including liquidity and funding risk management.

The Group ALCO delegates to the Group Tactical Asset and Liability Management Committee ("TALCO") the task of reviewing various analyses of the Group pertaining to site liquidity and funding. TALCO's primary responsibilities include but are not limited to:

- reviewing the funding structure of operating entities and the allocation of liquidity among them;
- reviewing operating entities' list of liquid securities and documented proof that a deep and liquid market exists; and
- monitoring liquidity and funding limit breaches and providing direction to those operating entities that have not been able to rectify breaches on a timely basis.

Compliance with liquidity and funding requirements is monitored by the ALCO and is reported to the Risk Management Meeting ("RMM"), Executive Committee, Risk Committee and the Board of Directors on a regular basis. This process includes:

- maintaining compliance with relevant regulatory requirements of the reporting entity;
- projecting cash flows under various stress scenarios and considering the level of liquid assets necessary in relation thereto;
- monitoring liquidity and funding ratios against internal and regulatory requirements;
- maintaining a diverse range of funding sources with adequate back-up facilities;
- managing the concentration and profile of term funding;
- managing contingent liquidity commitment exposures within pre-determined limits;
- managing debt financing plans;
- monitoring of depositor concentration in order to avoid undue reliance on large individual depositors and ensuring a satisfactory overall funding mix; and
- maintaining liquidity and contingency funding plans. These plans identify early indicators of stress conditions and describe actions to be taken in the event of difficulties arising from systemic or other crises, while minimising adverse long-term implications for the business.

## Management Discussion and Analysis *(continued)*

### Risk Management *(continued)*

#### (b) Liquidity and funding risk *(continued)*

From 1 January 2016 the Group implemented a new internal Liquidity and Funding Risk Management Framework (the "LFRF"). It uses the Liquidity Coverage Ratio ("LCR") and Net Stable Funding Ratio ("NSFR") regulatory framework as a foundation, but adds extra metrics, limits and overlays to address the risks that the Group considers are not adequately reflected by the regulatory framework.

The LFRF is delivered using the following key aspects:

- Standalone management of liquidity and funding by operating entity;
- Operating entity classification by inherent liquidity risk ('ILR') categorisation;
- Minimum LCR requirement depending on ILR categorisation;
- Minimum NSFR requirement depending on ILR categorisation;
- Depositor concentration limit;
- Three-month and twelve-month cumulative rolling term contractual maturity limits covering deposits from banks, deposits from non-bank financial institutions and securities issued;
- Minimum LCR requirement by currency;
- Intraday liquidity management;
- Forward-looking funding assessments.
- Annual Individual Liquidity Adequacy Assessment ('ILAA')

ILAA process aims to:

- Identify risks that are not reflected in the LFRF, and, where required, to assess additional limits; and
- Validate the risk tolerance.

The new internal LFRF and the risk tolerance (limits) were approved by the RMM, and by the Board on the basis of the recommendation given by the Risk Committee.

## Management Discussion and Analysis (continued)

### Risk Management (continued)

#### (b) Liquidity and funding risk (continued)

##### The management of liquidity and funding risk

###### *Inherent liquidity risk categorisation* (audited)

The Group places its operating entities into one of two categories to reflect the assessment of their inherent liquidity risk, considering political, economic and regulatory factors within the host country and factors specific to the operating entities themselves, such as the local market, market share and balance sheet strength. The categorisation involves management judgement and is based on the perceived liquidity risk of an operating entity relative to other entities in the Group. The categorisation is intended to reflect the possible impact of a liquidity event, not the probability of an event. It is used to determine the prescribed stress scenario that the Group requires its operating entities to be able to withstand and manage to.

###### *Liquidity coverage ratio* (Unaudited)

The LCR metric is designed to promote the short-term resilience of a bank's liquidity profile. It aims to ensure that a bank has sufficient unencumbered high-quality liquid assets ('HQLA') to meet its liquidity needs in a 30-calendar-day liquidity stress scenario. HQLA consist of cash or assets that can be converted into cash at little or no loss of value in markets. The Group calculate LCR in line with the standard published by Basel Committee on Banking Supervision.

As at 31 December 2016, all the Group's operating entities were within the risk tolerance level approved by the Board.

###### *Net stable funding ratio* (Unaudited)

The NSFR requires institutions to maintain sufficient stable funding relative to required stable funding, and reflects a bank's long-term funding profile (funding with a term of more than a year). It is designed to complement the LCR. The Group calculate NSFR in line with the standard published by the Basel Committee on Banking Supervision.

As at 31 December 2016, all the Group's operating entities were within the risk tolerance level approved by the Board.

###### *Depositor concentration and term funding maturity concentration* (Unaudited)

The LCR and NSFR metrics assume a stressed outflow based on a portfolio of depositors within each deposit segment. The validity of these assumptions is challenged if the underlying depositors do not represent a large enough portfolio so that a depositor concentration exists. Operating entities are also exposed to term re-financing concentration risk if the current maturity profile results in future maturities being overly concentrated in any defined period.

As at 31 December 2016, all the Group's operating entities were within the risk tolerance level approved by the Board.

###### *Sources of funding* (unaudited)

Customer deposits in the form of current accounts and savings deposits payable on demand or at short notice form a significant part of our stable funding. We also access wholesale funding markets by issuing senior secured and unsecured debt securities and borrowing from the secured repo markets against high quality collateral, in order to supplement our customer deposits, to align asset and liability maturities and currencies and to maintain a presence in local wholesale markets.

###### *Currency mismatch* (unaudited)

The Group allows currency mismatches to provide some flexibility in managing the balance sheet structure and to carry out foreign exchange trading, on the basis that there is sufficient liquidity in the swap market to support currency conversion in periods of stress. The Group sets limits on cash flow projection for all material currencies based on liquidity in the swap markets. These limits are approved and monitored by ALCO.

###### *Additional contractual obligations* (Unaudited)

Most of the Group's derivative transactions are exchange rate contracts and interest rate contracts. Under the terms of our current collateral obligations under derivative contracts (which are ISDA compliant CSA contracts), in the event of a three-notch downgrade in credit ratings, the additional collateral required to post is immaterial.

## Management Discussion and Analysis (continued)

### Risk Management (continued)

#### (b) Liquidity and funding risk (continued)

##### Liquidity regulation

(unaudited)

The Banking (Liquidity) Rules were introduced by the HKMA in 2014 and became effective from 1 January 2015, signified the implementation of Liquidity Coverage Ratio ('LCR') for category 1 Institution under Basel III liquidity standards in Hong Kong. Under rule 11(1), the Group is required to calculate its LCR on a consolidated basis. During 2016 the Group is required to maintain a LCR of not less than 70%, increasing in steps of 10% each year to not less than 100% by January 2019. The NSFR is expected to be implemented in Hong Kong from 1 January 2018.

The average LCRs for the period are as follows:

	Quarter ended							
	31 December 2016	30 September 2016	30 June 2016	31 March 2016	31 December 2015	30 September 2015	30 June 2015	31 March 2015
Average LCR	<b>253.6%</b>	<b>284.0%</b>	<b>257.1%</b>	<b>257.1%</b>	195.0%	237.2%	221.6%	167.4%

The liquidity position of the Group remained strong in 2016. The average LCR ranged from 253.6% to 284.0% for the reportable quarters. The increase in average LCR in 2016 mainly reflecting the Group has deployed the commercial surplus in high quality liquid assets given the subdued credit demand.

To comply with the Banking (Disclosure) Rules, the details of liquidity information can be found in the Regulatory Disclosures section of our website [www.hangseng.com](http://www.hangseng.com).

The majority of HQLA included in the LCR are Level 1 assets as defined in the Banking (Liquidity) Rules, which consist mainly of government debt securities.

	Weighted amount (Average value) at quarter ended							
	31 December 2016	30 September 2016	30 June 2016	31 March 2016	31 December 2015	30 September 2015	30 June 2015	31 March 2015
Level 1 assets	<b>301,633</b>	<b>296,792</b>	<b>290,202</b>	<b>249,886</b>	246,678	224,759	215,120	166,084
Level 2A assets	<b>15,526</b>	<b>16,628</b>	<b>16,139</b>	<b>14,492</b>	13,645	13,864	10,177	7,391
Level 2B assets	<b>595</b>	<b>640</b>	<b>599</b>	<b>589</b>	782	1,140	1,214	1,097
Total	<b>317,754</b>	<b>314,060</b>	<b>306,940</b>	<b>264,967</b>	261,105	239,763	226,511	174,572

## Management Discussion and Analysis (continued)

### Risk Management (continued)

#### (b) Liquidity and funding risk (continued) (audited)

The below tables are an analysis of undiscounted cash flows on the Group's financial liabilities including future interest payments on the basis of their earliest possible contractual maturities.

The balances in the below tables will not agree with the balances in the balance sheet as the tables incorporate, on an undiscounted basis, all cash flows relating to principal and all future coupon payments (except for trading liabilities and trading derivatives). Also, loans commitments and financial guarantee contracts are generally not recognised on the balance sheet. Trading liabilities and trading derivatives have been included in the "On demand" time bucket, and not by contractual maturity, because trading liabilities are typically held for short periods of time. The undiscounted cash flows on hedging derivative liabilities are classified according to their contractual maturities.

Cash flows payable in respect of customer accounts are primarily contractually repayable on demand or at short notice. However, in practice, short-term deposit balances remain stable as inflows and outflows broadly match and a significant portion of loans commitments expire without being drawn upon. The undiscounted cash flows potentially payable under loan commitments and financial guarantee are classified on the basis of the earliest date they can be called.

	Repayable on demand	Three months or less but not on demand	Over three months but within one year	Over one year but within five years	Over five years	Total
<b>At 31 December 2016</b>						
Current, savings and other deposit accounts	790,305	161,830	37,747	1,647	-	991,529
Repurchase agreements – non-trading	-	1,805	-	-	-	1,805
Deposits from banks	1,477	12,600	-	-	-	14,077
Financial liabilities designated at fair value	3	16	3,048	528	504	4,099
Trading liabilities	68,124	-	-	-	-	68,124
Derivative financial instruments	12,728	204	215	337	-	13,484
Certificates of deposit and other debt securities in issue	-	35	5,153	-	-	5,188
Other financial liabilities	9,560	10,892	1,696	4	2	22,154
Subordinated liabilities	-	30	89	475	2,395	2,989
	<u>882,197</u>	<u>187,412</u>	<u>47,948</u>	<u>2,991</u>	<u>2,901</u>	<u>1,123,449</u>
Loan commitments	312,472	69,665	7	-	-	382,144
Financial guarantee and credit risk related guarantee contracts	17,927	88	1	-	-	18,016
	<u>330,399</u>	<u>69,753</u>	<u>8</u>	<u>-</u>	<u>-</u>	<u>400,160</u>
<b>At 31 December 2015</b>						
Current, savings and other deposit accounts	704,866	217,132	37,287	1,207	-	960,492
Repurchase agreements – non-trading	-	2,316	-	-	-	2,316
Deposits from banks	6,654	12,128	-	-	-	18,782
Financial liabilities designated at fair value	2	17	48	3,592	501	4,160
Trading liabilities	62,917	-	-	-	-	62,917
Derivative financial instruments	9,395	130	115	377	5	10,022
Certificates of deposit and other debt securities in issue	-	31	53	5,255	-	5,339
Other financial liabilities	6,568	9,937	1,321	14	3	17,843
Subordinated liabilities	-	27	79	423	2,514	3,043
	<u>790,402</u>	<u>241,718</u>	<u>38,903</u>	<u>10,868</u>	<u>3,023</u>	<u>1,084,914</u>
Loan commitments	304,879	59,338	57	-	-	364,274
Financial guarantee and credit risk related guarantee contracts	14,497	100	1	-	-	14,598
	<u>319,376</u>	<u>59,438</u>	<u>58</u>	<u>-</u>	<u>-</u>	<u>378,872</u>

## Management Discussion and Analysis (continued)

### Risk Management (continued)

#### (c) Market risk (unaudited)

Market risk is the risk that movements in market factors, including foreign exchange rates and commodity prices, interest rates, credit spreads and equity prices, will reduce our income or the value of our portfolios.

There were no significant changes to our policies and practices for the management of market risk in 2016.

Exposure to market risk is separated into two portfolios:

- Trading portfolios comprise positions arising from market-making and warehousing of customer-derived positions.
- Non-trading portfolios comprise positions that primarily arise from the interest rate management of our retail and commercial banking assets and liabilities, and financial investments designated as available-for-sale.

The diagram below illustrates the major trading and non-trading market risk types and market risk measures used to monitor and limit exposures.

Risk Type	Trading Risk	Non-Trading Risk
	- Foreign exchange & Commodities - Interest rates - Credit spreads	- Structural foreign exchange - Interest rates - Credit spreads
Risk Measure	VaR / Sensitivity / Stress testing	VaR / Sensitivity / Stress testing

Where appropriate, the Group applies similar risk management policies and measurement techniques to both trading and non-trading portfolios. The Group's objective is to manage and control market risk exposures in order to optimise return on risk while maintaining a market profile consistent with the status as a professional banking and financial services organisation.

The nature of the hedging and risk mitigation strategies range from the use of traditional market instruments, such as interest rate swaps, to more sophisticated hedging strategies to address a combination of risk factors arising at portfolio level.

#### Market risk governance (unaudited)

Market risk is managed and controlled through limits approved by the Group's Chief Risk Officer, noting the support of Risk Management Meeting ("RMM"). These limits are allocated across business lines and to the Group's legal entities, including Hang Seng Bank (China) Limited.

The management of market risk is principally undertaken in Global Markets using risk limits allocated from the risk appetite, which is subject to the Board's approval. Limits are set for portfolios, products and risk types where appropriate, with market liquidity and business need being primary factors in determining the level of limits set.

An independent market risk management and control function is responsible for measuring, monitoring and reporting market risk exposures against the prescribed limits on a daily basis.

Model risk is governed through Model Oversight Committee ("MOC") at the Wholesale Credit and Market Risk ("WCMR") level. The MOC has direct oversight on traded risk models utilised for risk measurement and management and stress testing to ensure that they remain within our risk appetite and business plans.

Our control of market risk in the trading and non-trading portfolios is based on a policy of restricting trading within a list of permissible instruments authorised for each business lines, of enforcing new product approval procedures, and of restricting trading in the more complex derivative products only to business lines with appropriate levels of product expertise and robust control systems.

#### Monitoring and limiting market risk exposures

The Group's objective is to manage and control market risk exposures while maintaining a market profile consistent with the Group's risk appetite.

The Group uses a range of tools to monitor and limit market risk exposures including sensitivity analysis, value at risk ("VAR"), and stress testing.

## Management Discussion and Analysis (continued)

### Risk Management (continued)

#### (c) Market risk (continued)

##### *Sensitivity analysis (unaudited)*

Sensitivity analysis measures the impact of individual market factor movements on specific instruments or portfolios including interest rates, foreign exchange rates and equity prices. The Group uses sensitivity measures to monitor the market risk positions within each risk type, for example, the present value of a basis point movement in interest rates for interest rate risk.

Sensitivity limits are set for portfolios, products and risk types, with the depth of the market being one of the principal factors in determining the level of limits set.

##### *Value at risk ("VAR") (audited)*

VAR is a technique that estimates the potential losses on risk positions as a result of movements in market rates and prices over a specified time horizon and to a given level of confidence. The use of VAR is integrated into market risk management and is calculated for all trading positions regardless of how the Group capitalises those exposures. Where there is no approved internal model, the Group uses the appropriate local rules to capitalise exposures.

In addition, the Group calculates VAR for non-trading portfolios in order to have a complete picture of market risk. Where VAR is not calculated explicitly, alternative tools are used.

Standard VAR is calculated at a 99% confidence level for a one-day holding period while Stressed VAR ("SVAR") uses a 10-day holding period and a 99% confidence interval based on a continuous one-year historical significant stress period. The VAR models used by the Group are based predominantly on historical simulation. These models derive plausible future scenarios from past series of recorded market rates and prices, taking into account inter-relationships between different markets and rates such as interest rates and foreign exchange rates. The models also incorporate the effect of option features on the underlying exposures.

The historical simulation models used incorporate the following features:

- historical market rates and prices are calculated with reference to foreign exchange rates and commodity prices, interest rates, equity prices and the associated volatilities;
- potential market movements utilised for Standard VAR are calculated with reference to data from the past two years; and
- Standard VAR is calculated to a 99% confidence level and use a one-day holding period scaled to 10 days.

The nature of the VAR models means that an increase in observed market volatility will lead to an increase in VAR without any changes in the underlying positions.

##### *VAR model limitations*

Although a valuable guide to risk, VAR should always be viewed in the context of its limitations. For example:

- the use of historical data as a proxy for estimating future events may not encompass all potential events, particularly those which are extreme in nature;
- the use of a holding period assumes that all positions can be liquidated or the risks offset during that period. This may not fully reflect the market risk arising at times of severe illiquidity, when the holding period may be insufficient to liquidate or hedge all positions fully;
- the use of a 99% confidence level, by definition does not take into account losses that might occur beyond this level of confidence;
- VAR is calculated on the basis of exposures outstanding at the close of business and therefore does not necessarily reflect intra-day exposures; and
- Standard VAR is unlikely to reflect loss potential on exposures that only arise under significant market movements.



## Management Discussion and Analysis (continued)

### Risk Management (continued)

#### (c) Market risk (continued)

##### **Risk not in VAR ("RNIV") framework** (unaudited)

The Group's VAR model is designed to capture significant basis risks such as asset swap spreads and cross-currency basis. Other basis risks which are not completely covered in VAR, such as the LIBOR tenor basis, are complemented by RNIV calculations and are integrated into the capital framework.

The RNIV framework aims to manage and capitalise material market risks that are not adequately covered in the VAR model. In such instances the RNIV framework uses stress tests to quantify the capital requirement. On average in 2016, the capital requirement derived from these stress tests represented 1.2% of the total internal model-based market risk requirement.

RNIV is not viewed as being a material component of the Group's market risk capital requirement. Risks covered by RNIV represent 1.2% of market risk RWAs for models with regulatory approval.

Risk factors are reviewed on a regular basis and either incorporated directly in the VAR models, where possible, or quantified through the VAR-based RNIV approach or a stress test approach within the RNIV framework. The severity of the scenarios is calibrated to be in line with the capital adequacy requirements.

##### **Stress testing** (unaudited)

Stress testing is an important tool that is integrated into the Group's market risk management tool to evaluate the potential impact on portfolio values of more extreme, although plausible, events or movements in a set of financial variables. In such abnormal scenarios, losses can be much greater than those predicted by VAR modelling.

Stress testing is implemented at the legal entity and the overall Group levels. Scenarios are tailored in order to capture the relevant events or market movements. A scoring framework is in place for management to effectively assess the severity of the potential stress losses and the likelihood of occurrence of the stress scenarios.

The process is governed by the HSBC Stress Testing Review Group forum which the Group being a participating member determines the scenarios to be applied at portfolio and consolidated level, as follows:

- sensitivities scenarios consider the impact of a single risk factor, for example, break of a currency peg;
- technical scenarios consider the largest move in each risk factor without consideration of any underlying market correlation;
- hypothetical scenarios consider the impact of potential macroeconomic events, for example, the slowdown in mainland China;
- historical scenarios incorporate historical observations of market movements; and
- reverse stress testing.

Market Risk Reverse stress tests are undertaken based upon the premise that there is a fixed loss. The stress test process identifies which scenarios lead to this loss. The rationale behind the reverse stress test is to understand scenarios which are beyond normal business settings that could have contagion and systemic implications.

Stressed VAR and stress testing, together with reverse stress testing, provide management with insights regarding the "tail risk" beyond VAR for which the Group appetite is limited.

## Management Discussion and Analysis (continued)

### Risk Management (continued)

#### (c) Market risk (continued)

##### De-peg risk (unaudited)

For certain currencies (pegged or managed) the spot exchange rate is pegged at a fixed rate (typically to USD or EUR), or managed within a predefined band around a pegged rate. De-peg risk is the risk of the peg or managed band changing or being abolished, and moving to a floating regime.

The Group has considerable experience in managing fixed and managed currency regimes. Using stressed scenarios on spot rates, we are able to analyse how de-peg events would impact the positions held by the Group. We monitor such scenarios to pegged or managed currencies, such as the Hong Kong dollar and renminbi, and limit any potential losses that would occur. This complements traditional market risk metrics, such as historical VaR, which may not fully capture the risk involved in holding positions in pegged or managed currencies. Historical VaR relies on past events to determine the likelihood of potential profits or losses. However, pegged or managed currencies may not have experienced a de-peg event during the historical timeframe being considered.

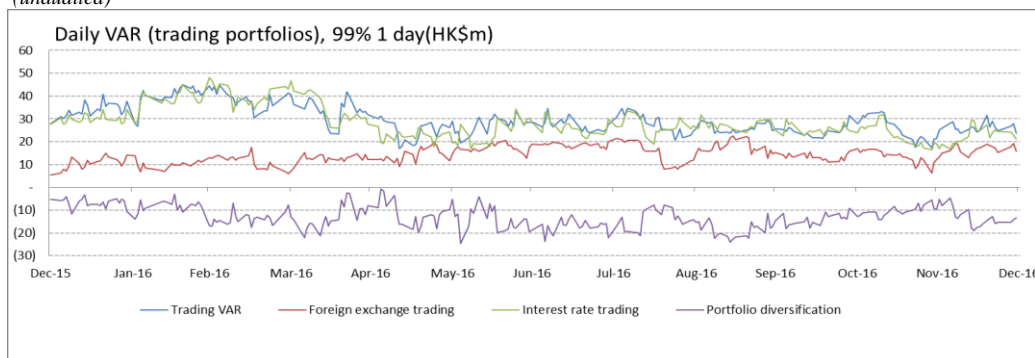
##### Trading portfolios (audited)

##### VAR of the trading portfolios

Trading VAR predominantly resides within Global Markets. The VAR and SVAR for trading activity at 31 December 2016 were lower than at 31 December 2015, mainly driven by reduced interest rate trading activities.

The daily levels of total trading VAR over the last year are set out in the graph below.

##### Daily VAR (trading portfolios), 99% 1 day (HK\$m) (unaudited)



## Management Discussion and Analysis (continued)

### Risk Management (continued)

#### (c) Market risk (continued)

The Group's trading VAR for the year is shown in the table below.

#### Trading, 99% 1 day (audited)

	At 31 December 2016	Minimum during the year	Maximum during the year	Average for the year
<b>VAR</b>				
Trading	24	17	45	30
Foreign exchange trading	16	6	22	14
Interest rate trading	21	16	48	28
Portfolio diversification (unaudited)	(13)	-	-	(12)
<b>Stressed VAR</b>				
Trading	108	52	220	129
Foreign exchange trading	28	3	42	24
Interest rate trading	94	58	226	144
	At 31 December 2015	Minimum during the year	Maximum during the year	Average for the year
<b>VAR</b>				
Trading	28	12	52	29
Foreign exchange trading	5	5	48	22
Interest rate trading	28	8	32	18
Portfolio diversification (unaudited)	(5)	-	-	(11)
<b>Stressed VAR</b>				
Trading	188	25	219	136
Foreign exchange trading	3	1	226	78
Interest rate trading	222	22	246	110

<sup>1</sup> Trading portfolios comprise positions arising from the market-making and warehousing of customer-derived positions.

<sup>2</sup> Portfolio diversification is the market risk dispersion effect of holding a portfolio containing different risk types. It represents the reduction in unsystematic market risk that occurs when combining a number of different risk types, for example, interest rate and foreign exchange, together in one portfolio. It is measured as the difference between the sum of the VaR by individual risk type and the combined total VaR. A negative number represents the benefit of portfolio diversification. As the maximum and minimum occur on different days for different risk types, it is not meaningful to calculate a portfolio diversification benefit for these measures.

## Management Discussion and Analysis (continued)

### Risk Management (continued)

#### (c) Market risk (continued)

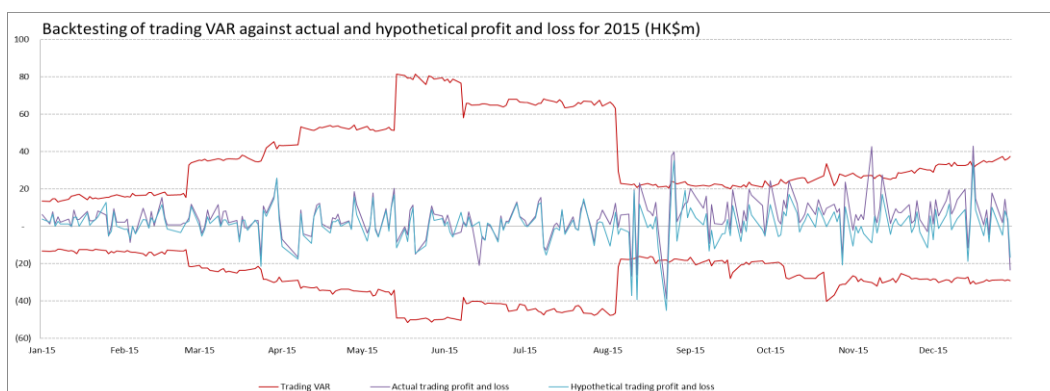
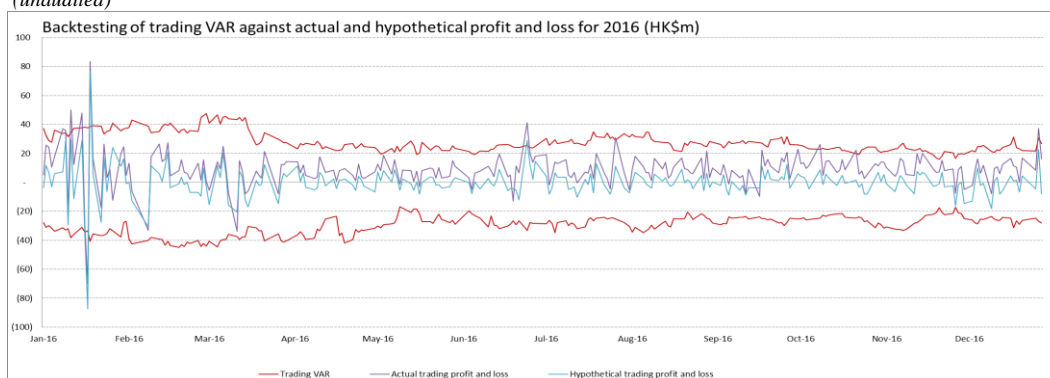
##### **Backtesting** (unaudited)

In 2016, there were two loss exceptions and ten profit exceptions for the Group during the year.

The loss exceptions were mainly triggered by the volatile RMB and HKD markets observed in January 2016. On the other hand, the profit exceptions were mainly driven by intraday profit arising from trading activities.

The graph below shows the daily trading VAR against actual and hypothetical profit and loss for the Group during 2016.

##### **Backtesting of trading VAR against actual and hypothetical profit and loss for the Group (HK\$m)** (unaudited)



The Group routinely validates the accuracy of the VAR models by back-testing both actual and hypothetical profit and loss against the trading VAR numbers. Hypothetical profit and loss excludes non-modelled items such as fees, commissions and revenues of intra-day transactions.

The Group would expect on average to see two or three profits, and two or three losses, in excess of VAR at the 99% confidence level over a one-year period. The actual number of profits or losses in excess of VAR over this period can therefore be used to gauge how well the models are performing. To ensure a conservative approach in calculating our risk exposures, it is important to note that profits in excess of VAR are only considered when back-testing the accuracy of models and are not used to calculate the VAR numbers used for risk management or capital purposes.

## Management Discussion and Analysis (continued)

### Risk Management (continued)

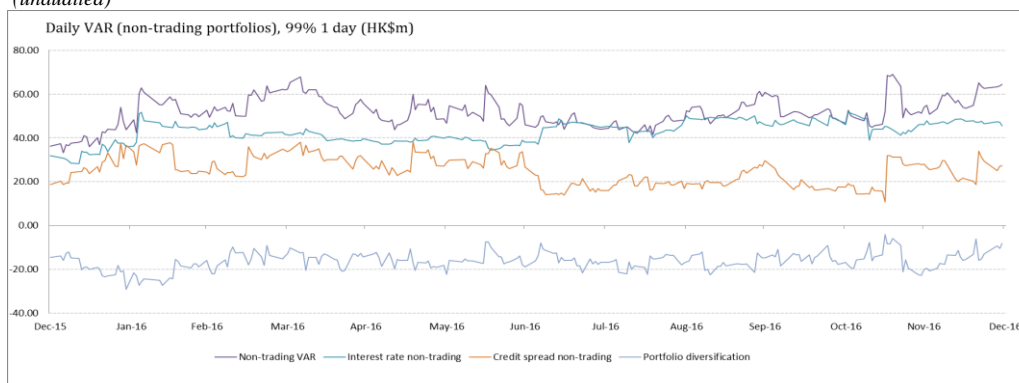
#### (c) Market risk (continued)

##### Non-trading portfolios (unaudited)

##### VAR of the non-trading portfolios

Non-trading VAR of the Group predominantly relates to Balance Sheet Management ("BSM"). Contributions to non-trading VAR are driven by interest rates and credit spread risks. There is no commodity risk in the non-trading portfolios. The daily levels of total non-trading VAR over the last year are set out in the graph below.

##### Daily VAR (non-trading portfolios), 99% 1 day (HK\$m) (unaudited)



The Group's non-trading VAR for the year is shown in the table below.

##### Non-trading VAR, 99% 1 day (audited)

	At 31 December 2016	Minimum during the year	Maximum during the year	Average for the year
<b>VAR</b>				
Non-trading	64	33	69	52
Interest rate non-trading	45	28	52	43
Credit spread non-trading (unaudited)	27	11	38	25
Portfolio diversification (unaudited)	(8)	-	-	(16)
	At 31 December 2015	Minimum during the year	Maximum during the year	Average for the year
<b>VAR</b>				
Non-trading	36	28	50	36
Interest rate non-trading	32	24	39	32
Credit spread non-trading (unaudited)	19	9	30	16
Portfolio diversification (unaudited)	(15)	-	-	(12)

In measuring, monitoring and managing risk in our non-trading portfolios, VAR is just one of the tools used. The management of interest rate risk in the banking book is described further in "Non-trading interest rate risk" below, including the role of BSM.

Non-trading VAR excludes equity risk on available-for-sale securities, structural foreign exchange risk, and interest rate risk on fixed rate securities issued by HSBC Holdings, the management of which is described in the relevant sections below.

## Management Discussion and Analysis (continued)

### Risk Management (continued)

#### (c) Market risk (continued)

##### *Non-trading VAR, 99% 1 day (continued)* *(audited)*

The Group's control of market risk in the non-trading portfolios is based on transferring the assessed market risk of non-trading assets and liabilities created outside BSM or Global Markets, to the books managed by BSM, provided the market risk can be neutralised. The net exposure is typically managed by BSM through the use of fixed rate government bonds (liquid asset held in available-for-sale books) and interest rate swaps. The interest rate risk arising from fixed rate government bonds held within available-for-sale portfolios is reflected within the Group's non-trading VAR. Interest rate swaps used by BSM are typically classified as either a fair value hedge or a cash flow hedge and included within the Group's non-trading VAR. Any market risk that cannot be neutralised in the market is managed by local ALCO in segregated ALCO books.

##### **Credit spread risk for available-for-sale debt securities** *(unaudited)*

The risk associated with movements in credit spreads is primarily managed through sensitivity limits, stress testing and VAR. The credit spread VAR is derived from a one-day movement in credit spreads over a two-year period, calculated to a 99% confidence interval.

The credit spread VAR on our available-for-sale debt securities was HK\$27m (2015: HK\$19m) at 31 December 2016. The increase in credit spread VAR was due mainly to the larger available-for-sale portfolio as a result of more commercial surplus.

##### **Interest rate exposure** *(audited)*

Interest rate risks comprise those originating from Global Markets activities, both trading and non-trading portfolios which include structural interest rate exposures. Global Markets manages interest rate risks within the limits approved by the Chief Risk Officer and under the monitoring of both ALCO and RMM.

##### **Trading interest rate risk** *(audited)*

The Group's control of market risk is based on restricting individual operations to trading within VAR and underlying sensitivity limits including foreign exchange position limits, present value of a basis point limits and option limits, and a list of permissible instruments authorised by the Chief Risk Officer, noting the support of RMM, and enforcing rigorous new product approval procedures. In particular, trading in the derivative products is supported by robust control systems whereas more complicated derivatives are mainly traded on back-to-back basis. Analysis of VAR for trading portfolio is disclosed in "Value at Risk" section.

##### **Non-trading interest rate risk** *(audited)*

Non-trading interest rate risk in non-trading portfolios arises principally from mismatches between the future yield on assets and their funding cost, as a result of interest rate changes.

Analysis of this risk is complicated by having to make assumptions on embedded optionality within certain product areas, such as the incidence of mortgage prepayments, and from behavioural assumptions regarding the economic duration of liabilities which are contractually repayable on demand, such as current accounts, and the re-pricing behaviour of managed rate products.

In order to manage this risk optimally, non-trading interest rate risks is transferred to BSM or to separate books managed under the supervision of the Asset, Liability and Capital Management Committee ('ALCO'). The transfer of market risk to books managed by BSM or supervised by ALCO is usually achieved by a series of internal deals between the business units and these books. When the behavioural characteristics of a product differ from its contractual characteristics, the behavioural characteristics are assessed to determine the true underlying interest rate risk. ALCO regularly monitors all such behavioural assumptions and interest rate risk positions, to ensure they comply with interest rate risk limits established by senior management.

## Management Discussion and Analysis (continued)

### Risk Management (continued)

#### (c) Market risk (continued)

##### *Sensitivity of net interest income*

A principal part of the Group's management of non-trading interest rate risk in non-trading portfolios is to monitor the sensitivity of projected net interest income under varying interest rate scenarios (simulation modelling).

The table below sets out the impact on future net interest income of a 100 basis points parallel fall or rise in all-in yield curves at the beginning of year from 1 January 2017 and 25 basis points parallel fall or rise in all-in yield curves at the beginning of each quarter during the 12 month period from 1 January 2017.

Assuming no management actions, such a series of incremental parallel rises in all-in yield curves would increase planned net interest income for the year ending 31 December 2017 by HK\$2,832m for 100 basis points case and by HK\$1,897m for 25 basis points case, while such a series of incremental parallel falls in all-in yield curves would decrease planned net interest income by HK\$4,848m for 100 basis points case and by HK\$2,817m for 25 basis points case. These figures incorporate the impact of any option features in the underlying exposures and take into account the change in pricing of retail products relative to change in market interest rates.

##### **Projected Net Interest Income** (audited)

The sensitivity of projected net interest income is described as follows:

	<b>100bp parallel increase</b>	<b>100bp parallel decrease</b>	<b>25bp increase at the beginning of each quarter</b>	<b>25bp decrease at the beginning of each quarter</b>
<b>Change in 2017 projected net interest income</b>				
- HKD	1,453	(3,227)	1,051	(1,894)
- US\$	679	(1,239)	457	(719)
- other	700	(382)	389	(204)
Total	<u>2,832</u>	<u>(4,848)</u>	<u>1,897</u>	<u>(2,817)</u>
<b>Change in 2016 projected net interest income</b>				
- HKD	844	(2,062)	622	(1,371)
- US\$	891	(1,023)	582	(663)
- other	1,019	(622)	710	(445)
Total	<u>2,754</u>	<u>(3,707)</u>	<u>1,914</u>	<u>(2,479)</u>

## Management Discussion and Analysis (continued)

### Risk Management (continued)

#### (c) Market risk (continued)

The interest rate sensitivities set out in the table above represent the effect of the pro forma movements in net interest income based on the projected yield curve scenarios and the Group's current interest rate risk profile. This effect, however, does not incorporate actions that would be taken by BSM or in the business units to mitigate the impact of this interest rate risk. In reality, BSM seeks proactively to change the interest rate risk profile to minimise losses and optimise net revenues. The net interest income sensitivity calculations assume that interest rates of all maturities move by the same amount in the "up-shock" scenario. Rates are not assumed to become negative in the "down-shock" scenario which may, in certain currencies, effectively result in non-parallel shock. In addition, the net interest income sensitivity calculations take account of the effect on net interest income of anticipated differences in changes between interbank interest rates and interest rates over which the entity has discretion in terms of the timing and extent of rate changes.

#### *Sensitivity of reserves (unaudited)*

Available-for-sale ("AFS") reserves are included as part of CET1 capital. The Group measures the potential downside risk to the CET1 ratio due to interest rate and credit spread risk in the AFS portfolio by the portfolio's stressed VaR, using 99% confidence level and an assumed holding period of one quarter. At 31 December 2016, the stressed VaR of the portfolio was HK\$1,146 m.

The Group monitors the sensitivity of cash flow hedge reserves to interest rate movements on a quarterly basis by assessing the expected reduction in valuation of cash flow hedge due to parallel movements of plus or minus 100bps in all yield curves. These particular exposures form only a part of the Group's overall interest rate risk exposures.

The following table describes the sensitivity of cash flow hedge reserves to the stipulated movements in yield curves and the maximum and minimum quarter-end figures during the year. The sensitivities are indicative and based on simplified scenarios.

	<b>At 31 December 2016</b>	<b>Maximum impact</b>	<b>Minimum impact</b>
+ 100 basis points parallel move in all-in yield curves	(132)	(136)	(52)
As a percentage of shareholders' equity at 31 December 2016 (%)	(0.09)	(0.10)	(0.04)
- 100 basis points parallel move in all-in yield curves	35	35	(14)
As a percentage of shareholders' equity at 31 December 2016 (%)	0.02	0.02	(0.01)
	At 31 December 2015	Maximum impact	Minimum impact
+ 100 basis points parallel move in all-in yield curves	(191)	(309)	(191)
As a percentage of shareholders' equity at 31 December 2015 (%)	(0.13)	(0.22)	(0.13)
- 100 basis points parallel move in all-in yield curves	(30)	5	(30)
As a percentage of shareholders' equity at 31 December 2015 (%)	(0.02)	-	(0.02)



## Management Discussion and Analysis (continued)

### Risk Management (continued)

#### (c) Market risk (continued)

##### Foreign exchange exposure

(audited)

The Group's foreign exchange exposures mainly comprise foreign exchange dealing by Global Markets and currency exposures originated by its banking business. The latter are transferred to Global Markets where they are centrally managed within foreign exchange position limits approved by the Group's Chief Risk Officer, noting the support of Risk Management Meeting ("RMM"). The net options position is calculated on the basis of delta-weighted positions of all foreign exchange options contracts.

The Group's gross structural foreign exchange exposure is represented by the net asset value of the Group's foreign currency investments in subsidiaries, branches and associates, and the fair value of the Group's long-term foreign currency equity investments. The Group's structural foreign currency exposures are managed by the Group's ALCO with the primary objective of ensuring, where practical, that the Group's and the Bank's capital ratios are protected from the effect of changes in exchange rates.

At 31 December 2016, the US dollar ("USD"), was the currency in which the Group had non-structural foreign currency positions that was not less than 10% of the total net position in all foreign currencies. The Group also had a Chinese renminbi ("RMB") structural foreign currency position, which was not less than 10% of the total net structural position in all foreign currencies.

The tables below summarise the net structural and non-structural foreign currency positions of the Group.  
(unaudited)

	USD	RMB	Other foreign currencies	Total foreign currencies
<b>2016</b>				
<b>Non-structural position</b>				
Spot assets	172,791	112,264	138,224	423,279
Spot liabilities	(165,525)	(104,710)	(72,484)	(342,719)
Forward purchases	387,152	221,220	21,951	630,323
Forward sales	(392,160)	(228,723)	(87,438)	(708,321)
Net options position	260	(79)	(232)	(51)
Net long/(short) non- structural position	<u>2,518</u>	<u>(28)</u>	<u>21</u>	<u>2,511</u>
<b>Structural position</b>	<u>-</u>	<u>14,169</u>	<u>967</u>	<u>15,136</u>
<b>2015</b>				
<b>Non-structural position</b>				
Spot assets	204,267	148,933	137,573	490,773
Spot liabilities	(169,779)	(128,759)	(66,796)	(365,334)
Forward purchases	320,566	153,574	35,151	509,291
Forward sales	(355,062)	(170,630)	(106,024)	(631,716)
Net options position	212	(328)	121	5
Net long non- structural position	<u>204</u>	<u>2,790</u>	<u>25</u>	<u>3,019</u>
<b>Structural position</b>	<u>-</u>	<u>15,238</u>	<u>816</u>	<u>16,054</u>

##### Equities exposure

(audited)

The Group's equities exposures in 2016 and 2015 are mainly long-term equity investments which are reported as "Financial investments" set out in note 32 to the financial statements. Equities held for trading purpose are included under "Trading assets" set out in note 28 to the financial statements. These are subject to trading limit and risk management control procedures and other market risk regime.

## Management Discussion and Analysis (continued)

### Risk Management (continued)

#### (d) Insurance risk (audited)

##### **Risk management objectives and policies for management of insurance risk**

The majority of the risk in the insurance business derives from manufacturing activities and can be categorised as insurance risk and financial risk. Financial risks include market risk, credit risk and liquidity risk. Insurance risk is the risk, other than financial risk, of loss transferred from the holder of the insurance contract to the insurer.

##### **Group's bancassurance model**

We operate an integrated bancassurance model which provides insurance products principally for customers with whom we have a banking relationship. The insurance contracts we sell relate to the underlying needs of our banking customers, which we can identify from our point-of-sale contacts and customer knowledge. The majority of sales are of savings and investment products.

By focusing largely on personal and SME lines of business we are able to optimise volumes and diversify individual insurance risks.

We choose to manufacture these insurance products in a Group subsidiary based on an assessment of operational scale and risk appetite. Manufacturing insurance allows us to retain the risks and rewards associated with writing insurance contracts by keeping part of the underwriting profit and investment income within the Group.

Where we do not have the risk appetite or operational scale to be an effective insurance manufacturer, we engage with a handful of leading external insurance companies in order to provide insurance products to our customers through our banking network and direct channels. These arrangements are generally structured with our exclusive strategic partners and earn the group a combination of commissions, fees and a share of profits. We distribute insurance products in Hong Kong, China and Macau.

We do not manufacture general insurance products. These are sourced from external providers to meet customers' needs.

Insurance products are sold through all global businesses, but predominantly by RBWM and CMB through our branches and direct channels.

##### **Governance**

Insurance risks are managed to a defined risk appetite, which is aligned to the group risk appetite and enterprise risk management Framework (including the three lines of defence model). The Insurance Risk Management Meeting oversees the control framework and is accountable to the Group Risk Management Meeting on risk matters relating to insurance business.

The monitoring of the risks within the insurance operations is carried out by the Insurance Risk teams. Specific risk functions, including wholesale market risk, operational risk, information security risk and financial crime compliance, support Insurance Risk teams in their respective areas of expertise.

##### **Measurement**

The risk profile of our insurance manufacturing businesses is measured using an economic capital (EC) approach. Assets and liabilities are measured on a market value basis and a capital requirement is defined to ensure that there is a less than 1 in 200 chance of insolvency over a one year time horizon, given the risks that the businesses are exposed to. The methodology for the economic capital calculation is largely aligned to the pan-European Solvency II insurance capital regulations, which were applicable from January 2016. The EC coverage ratio (economic net asset value divided by the economic capital requirement) is a key risk appetite measure. The business has a current appetite to remain above 140% with a tolerance of 105%. In addition to EC, the regulatory solvency ratio is also a metric used to manage risk appetite on an entity basis.

## Management Discussion and Analysis (continued)

### Risk Management (continued)

#### (d) Insurance risk (continued)

The following table shows the composition of assets and liabilities for each major insurance product category.

#### Balance sheet of insurance subsidiaries by type of contract

	Linked contracts <sup>1</sup>	Non-linked contracts <sup>2</sup>	Other assets and liabilities <sup>3</sup>	Total
<b>2016</b>				
Financial assets:				
- financial assets designated at fair value	215	8,308	-	8,523
- derivatives	-	339	-	339
- financial investments	-	84,785	6,331	91,116
- other financial assets	3	7,315	516	7,834
Total financial assets	<u>218</u>	<u>100,747</u>	<u>6,847</u>	<u>107,812</u>
Reinsurance assets	-	7,496	-	7,496
Present value of in-force long-term insurance contracts	-	-	13,664	13,664
Other assets	-	5,435	1,485	6,920
Total assets	<u><u>218</u></u>	<u><u>113,678</u></u>	<u><u>21,996</u></u>	<u><u>135,892</u></u>
Liabilities under investment contracts				
designated at fair value	155	352	-	507
Liabilities under insurance contracts	70	108,256	-	108,326
Deferred tax	-	-	1,899	1,899
Other liabilities	-	3,538	1,271	4,809
Total liabilities	<u>225</u>	<u>112,146</u>	<u>3,170</u>	<u>115,541</u>
Shareholders' equity	-	-	20,351	20,351
Total liabilities and shareholders' equity	<u><u>225</u></u>	<u><u>112,146</u></u>	<u><u>23,521</u></u>	<u><u>135,892</u></u>
<b>2015</b>				
Financial assets:				
- financial assets designated at fair value	216	7,626	62	7,904
- derivatives	-	293	-	293
- financial investments	-	79,649	6,825	86,474
- other financial assets	17	4,818	740	5,575
Total financial assets	<u>233</u>	<u>92,386</u>	<u>7,627</u>	<u>100,246</u>
Reinsurance assets	-	5,818	-	5,818
Present value of in-force long-term insurance contracts	-	-	11,431	11,431
Other assets	-	5,289	1,504	6,793
Total assets	<u><u>233</u></u>	<u><u>103,493</u></u>	<u><u>20,562</u></u>	<u><u>124,288</u></u>
Liabilities under investment contracts				
designated at fair value	159	344	-	503
Liabilities under insurance contracts	71	101,746	-	101,817
Deferred tax	-	-	1,686	1,686
Other liabilities	-	-	1,599	1,599
Total liabilities	<u>230</u>	<u>102,090</u>	<u>3,285</u>	<u>105,605</u>
Shareholders' equity	-	-	18,683	18,683
Total liabilities and shareholders' equity	<u><u>230</u></u>	<u><u>102,090</u></u>	<u><u>21,968</u></u>	<u><u>124,288</u></u>

<sup>1</sup> Comprises life linked insurance contracts and linked investment contracts

<sup>2</sup> Comprises life non-linked insurance contracts and non-linked investment contracts

<sup>3</sup> Comprises shareholder assets and liabilities

## Management Discussion and Analysis (continued)

### Risk Management (continued)

#### (d) Insurance risk (continued)

##### Stress and Scenario Testing

Stress testing forms a key part of the risk management framework for the Insurance business. We participate in local and group-wide regulatory stress tests.

For 2016, these have highlighted that a key risk scenario for the Insurance business is a prolonged low interest rate environment. In order to mitigate the impact of this scenario, the insurance operations have a range of strategies that could be employed including the hedging of investment risk, re-pricing the current products to reflect lower interest rates, greater risk diversification and moving towards less capital intensive products and developing investment strategies to optimise the expected returns against the cost of economic capital.

##### Key Risk Types

###### Market risk (insurance)

Market risk is the risk of changes in market factors affecting the Group's capital or profit. Market factors include interest rates, equity and growth assets, spread risk and foreign exchange rates.

Our exposure varies depending on the type of contract issued. Our most significant life insurance products are insurance contracts with discretionary participating features (DPF) issued in Hong Kong. These products typically include some form of capital guarantee or guaranteed return, on the sums invested by the policyholders, to which discretionary bonuses are added if allowed by the overall performance of the funds. These funds are primarily invested in bonds with a proportion allocated to other asset classes, to provide customers with the potential for enhanced returns.

DPF products expose the Group to the risk of variation in asset returns, which will impact our participation in the investment performance. In addition, in some scenarios the asset returns can become insufficient to cover the policyholders' financial guarantees, in which case the shortfall has to be met by the Group. Allowances are made against the cost of such guarantees, calculated by stochastic modelling.

For unit-linked contracts, market risk is substantially borne by the policyholder, but some market risk exposure typically remains as fees earned are related to the market value of the linked assets.

Our insurance manufacturing subsidiary has market risk mandates which specify the investment instruments in which they are permitted to invest and the maximum quantum of market risk which they may retain. They manage market risk by using, amongst others, some or all of the techniques listed below, depending on the nature of the contracts written:

- for products with DPF, adjusting dividends to manage the liabilities to policyholders. The effect is that a significant portion of the market risk is borne by the policyholders;
- structuring asset portfolios to support projected liability cash flows;
- using derivatives to protect against adverse market movements or better match liability cash flows;
- for new products with investment guarantees, considering the cost when determining the level of premiums or the price structure;
- periodically reviewing products identified as higher risk, which contain investment guarantees in savings and investment products;
- designing new products to mitigate market risk, such as changing the investment return sharing portion between policyholders and the shareholder;
- exiting, to the extent possible, investment portfolios whose risk is considered unacceptable; and
- repricing premiums charged to policyholders.

## Management Discussion and Analysis (continued)

### Risk Management (continued)

#### (d) Insurance risk (continued)

It is not always possible to match asset and liability durations. This is due to uncertainty over the receipt of all future premiums and the timing of claims, and also because the forecast payment dates of liabilities may exceed the duration of the longest dated investments available. We use models to assess the effect of a range of future scenarios on the values of financial assets and associated liabilities, and employ the outcomes in determining how to best structure asset holdings to support liabilities.

The following table illustrates the effects of selected interest rate, equity price and foreign exchange rate scenarios on our profit for the year and the total equity of our insurance manufacturing subsidiary.

	2016		2015	
	Impact on profit after tax for the year	Impact on shareholders' equity	Impact on profit after tax for the year	Impact on shareholders' equity
+ 100 basis points parallel shift in yield curves	(144)	(416)	3	(295)
- 100 basis points parallel shift in yield curves	112	424	(247)	91

	2016		2015	
	Impact on profit after tax for the year	Impact on shareholders' equity	Impact on profit after tax for the year	Impact on shareholders' equity
10 per cent increase in equity prices	280	282	251	251
10 per cent decrease in equity prices	(228)	(231)	(196)	(196)
10% increase in USD exchange rate compared to all currencies	22	22	40	40
10% decrease in USD exchange rate compared to all currencies	(22)	(22)	(40)	(40)

Where appropriate, the effects of the sensitivity tests on profit after tax and net assets incorporate the impact of the stress on the PVIF. The relationship between the profit and net assets and the risk factors is non-linear and nonsymmetrical, therefore the results disclosed should not be extrapolated to measure sensitivities to different levels of stress. The sensitivities reflect the established risk sharing mechanism with policyholders for participating products, and are stated before allowance for management actions which may mitigate the effect of changes in the market environment. The sensitivities presented do not allow for adverse changes in policyholder behaviour that may arise in response to changes in market rates.

#### Credit risk (insurance)

Credit risk is the risk of financial loss if a customer or counterparty fails to meet their obligation under a contract, which arises in two main areas for our insurance manufacturers:

- risk of default by debt security counterparties after investing premiums to generate a return for policyholders and shareholders; and
- risk of default by reinsurance counterparties and non-reimbursement for claims made after ceding insurance risk.

Credit risk on assets supporting unit-linked liabilities is predominantly borne by the policyholder; therefore our exposure is primarily related to liabilities under non-linked insurance and investment contracts and shareholders' funds. The distribution of the financial instruments by credit quality is shown in the table on page 42.

Our insurance manufacturing subsidiary is responsible for the credit risk, quality and performance of their investment portfolios. Our assessment of the creditworthiness of issuers and counterparties is based primarily upon internationally recognised credit ratings and other publicly available information. Investment credit exposures are monitored against limits by our local insurance manufacturing subsidiary, and are aggregated and reported to Group Credit Risk. Stress testing is performed on the investment credit exposures using credit spread sensitivities and default probabilities.

We use a number of tools to manage and monitor credit risk. These include a credit report which contains a watch-list of investments with current credit concerns to identify investments which may be at risk of future impairment.

## Management Discussion and Analysis (continued)

### Risk Management (continued)

#### (d) Insurance risk (continued)

##### Liquidity risk (insurance)

Liquidity risk is the risk that an insurance operation, though solvent, either does not have sufficient financial resources available to meet its obligations when they fall due, or can secure them only at excessive cost.

The following table shows the expected undiscounted cash flows for insurance contract liabilities at balance sheet dates:

The liquidity risk exposure is wholly borne by the policyholder in the case of unit-linked business and is shared with the policyholder for non-linked insurance.

##### Expected maturity of insurance contract liabilities

	Expected cash flows (undiscounted)				Total
	Within 1 year	Over 1 year but within 5 years	Over 5 years but within 15 years	Over 15 years	
<b>2016</b>					
Non-linked insurance	11,203	40,943	79,720	69,920	201,786
Linked insurance	9	38	89	239	375
	<u>11,212</u>	<u>40,981</u>	<u>79,809</u>	<u>70,159</u>	<u>202,161</u>
<b>2015</b>					
Non-linked insurance	10,681	41,821	80,246	64,721	197,469
Linked insurance	7	33	93	389	522
	<u>10,688</u>	<u>41,854</u>	<u>80,339</u>	<u>65,110</u>	<u>197,991</u>

Risk is managed by cashflow matching and maintaining sufficient cash resources; investing in good credit-quality investments with deep and liquid markets, monitoring investment concentrations and restricting them where appropriate and establishing committed contingency borrowing facilities.

Quarterly liquidity risk reports and annual liquidity contingency plan are prepared and reviewed by management.

##### Insurance risk

Insurance risk is the loss through adverse experience, in either timing or amount, of insurance underwriting parameters (non-economic assumptions). These parameters include mortality, morbidity, longevity, lapses and unit costs. The principal risk we face is that, over time, the cost of the contract, including claims and benefits may exceed the total amount of premiums and investment income received.

The Group primarily manages its insurance risk through asset and liability management, product design, pricing and overall proposition management (e.g. lapses management by introducing surrender charges), underwriting policy, claims management process and reinsurance which cedes risks above our acceptable thresholds to an external reinsurer thereby limiting our exposure.

## Management Discussion and Analysis (continued)

### Risk Management (continued)

#### (d) Insurance risk (continued)

##### *Present value of in-force long-term insurance business ("PVIF")*

In calculating PVIF, expected cash flows are projected after adjusting for a variety of assumptions made by insurance operation to reflect local market conditions and management's judgement of future trends, and after applying risk margins to reflect any uncertainty in the underlying assumptions. Variations in actual experience and changes to assumptions can contribute to volatility in the results of the insurance business.

Actuarial Control Committee meets on a quarterly basis to review and approve assumptions proposed for use in the determination of the PVIF. All changes to non-economic assumptions, economic assumptions that are not observable and model methodology must be approved by the Actuarial Control Committee.

Economic assumptions are either set in a way that is consistent with observable market values or, in certain markets use is made of long-term economic assumptions. Setting such assumptions involves the projection of long-term interest rates and the time horizon over which observable market rates trend towards these long-term assumptions. The assumptions are informed by relevant historical data and by research and analysis performed by internal and external experts, including regulatory bodies. The valuation of PVIF will be sensitive to any changes in these long-term assumptions in the same way that it is sensitive to observed market movements, and the impact of such changes is included in the sensitivities presented below.

The group sets the risk discount rate applied to the PVIF calculation by starting from a risk-free rate curve and adding explicit allowances for risks not reflected in the best estimate cash flow modelling. Where shareholders provide options and guarantees to policyholders the cost of these options and guarantees is an explicit reduction to PVIF.

The following table shows the effect on the PVIF at balance sheet date of reasonably possible changes in the main economic and business assumptions:

	<b>2016</b>	2015
+ 100 basis points parallel shift in yield curves	<b>(141)</b>	8
- 100 basis points parallel shift in yield curves	<b>99</b>	(301)

The effects on PVIF shown above, as well as the effects on profit after tax and net assets shown below, are illustrative only and employ simplified scenarios. It should be noted that the effects may not be linear and therefore the results cannot be extrapolated. The effects are calculated taking into account the sharing of investment returns with policyholders through the discretionary participation feature. Other than that, they do not incorporate other actions that could be taken by management to mitigate effects nor do they take into account the consequential changes in policyholder behaviour.

##### *Non-economic assumptions*

The sensitivity of profit for the year and net assets to reasonably possible changes in assumptions used in respect of insurance businesses is as follows:

	Impact on 2016 results		Impact on 2015 results	
	Profit for the year	Net assets	Profit for the year	Net assets
10 per cent increase in mortality and/or morbidity rates	<b>(67)</b>	<b>(67)</b>	(63)	(63)
10 per cent decrease in mortality and/or morbidity rates	<b>63</b>	<b>63</b>	57	57
10 per cent increase in lapse rates	<b>(15)</b>	<b>(15)</b>	(9)	(9)
10 per cent decrease in lapse rates	<b>17</b>	<b>17</b>	11	11
10 per cent increase in expense rates	<b>(56)</b>	<b>(56)</b>	(56)	(56)
10 per cent decrease in expense rates	<b>56</b>	<b>56</b>	56	56

Mortality and morbidity risk is typically associated with life insurance contracts. The effect on profit of an increase in mortality or morbidity depends on the type of business being written.

Sensitivity to lapse rates depends on the type of contracts being written. For insurance contracts, claims are funded by premiums received and income earned on the investment portfolio supporting the liabilities. For a portfolio of term assurance, an increase in lapse rates typically has a negative effect on profit due to the loss of future income on the lapsed policies. However, some contract lapses have a positive effect on profit due to the existence of policy surrender charges.

## Management Discussion and Analysis (continued)

### Risk Management (continued)

#### (d) Insurance risk (continued)

##### *Process used to determine assumptions for long-term insurance contracts*

The process used to determine the assumptions is intended to result in stable and prudent estimates of future outcome. This is achieved by adopting relatively conservative assumptions which can withstand a reasonable range of fluctuation of actual experience. Annual review of the relevant experience is performed to assess the adequacy of margin between the assumptions adopted and the best estimate of future outcome. The assumptions that are considered include expenses and the probability of claims. Both risk discount rate and investment return assumptions are set on active basis with reference to market risk free yields.

For non-linked life business, the policy reserve is generally calculated on a modified net premium basis. The net premium is the level of premium payable over the premium payment period whose discounted value at the outset of the policy would be sufficient to exactly cover the discounted value of the original guaranteed benefits at maturity or at death if earlier. The net premium is then modified to allow for deferral of acquisition costs. The policy reserve is then calculated by subtracting the present value of future modified net premiums from the present value of the benefits guaranteed at maturity or death up to the balance sheet date, subject to a floor of the cash value. The modified net premium basis makes no allowance for voluntary discontinuance by policyholders as this would generally result in a reduced level of policy reserve.

For linked life business, the policy reserve is generally determined as the total account balance of all in-force policies with an additional provision for the unexpired insurance risk.

##### *Assumptions*

The principal assumptions underlying the calculation of the long-term insurance business provision are:

##### (i) Mortality

A base mortality table which is most appropriate for each type of contract is selected. An adjustment is included to reflect the Group's own experience with an annual investigation performed to ascertain the appropriateness of overall assumption.

##### (ii) Morbidity

The morbidity incidence rates, which mainly cover major illness and disability, are generally derived from the reinsurance costs which also form the pricing basis. A loading is generally added as a provision for adverse deviation. An annual investigation is performed to ascertain the appropriateness with the Group's insurance subsidiary's actual experience.

##### (iii) Discount rates

##### *Rate of interest*

	<b>2016</b>	2015
Policies denominated in HKD	<b>1.8%, 2.22%, 2.5% and 2.55%</b>	2.75%
Policies denominated in USD	<b>3.0% and 3.45%</b>	3.0%, 3.75%
Policies denominated in RMB	<b>2.32%, 2.9%, 3.0%, 3.3% and 3.32%</b>	2.32%, 2.90%, 3.00% and 3.50%
	<b>as varies by product</b>	as varies by product

Under the modified net premium method, the long-term business provision is sensitive to the interest rate used when discounting.



## Management Discussion and Analysis (continued)

### Risk Management (continued)

#### (d) Insurance risk (continued)

##### *Sensitivity to changes in variables*

The Group's insurance subsidiary re-runs its valuation models on various bases. An analysis of sensitivity around various scenarios provides an insight to the key risks which the Group's insurance company is exposed to. The table presented below demonstrates the sensitivity of insured liability estimates to particular movements in assumptions used in the estimation process. Certain variables can be expected to impact on life insurance liabilities more than others, and consequently a greater degree of sensitivity to these variables may be expected.

##### *Impact on reported profit to changes in key variable*

	<b>Change in variable %</b>	<b>Change in liabilities 2016</b>	2015
Base run		<b>91,364</b>	87,959
Discount rate	+1	<b>(2,624)</b>	(2,189)
Discount rate	-1	<b>10,980</b>	8,649
Mortality/Morbidity	+10	<b>94</b>	99
Mortality/Morbidity	-10	<b>(36)</b>	(60)

The analysis above has been prepared for a change in variable with all other assumptions remaining constant and ignores changes in values of the related assets.

For the sensitivity in discount rate, an absolute +/-1% of the discount rate is used. For the Mortality/ Morbidity sensitivity, a relative +/-10% (i.e. multiply the assumption by 110% or 90%) is used.

## Management Discussion and Analysis (continued)

### Risk Management (continued)

#### (e) Operational risk (audited)

Operational risk is the risk to achieving our strategy or objectives as a result of inadequate or failed internal processes, people and systems or from external events.

Responsibility for minimising operational risk lies with HASE's staff. All staff are required to manage the operational risks of the business and operational activities for which they are responsible.

#### *Operational risk management framework*

HASE's Operational Risk Management Framework (ORMF) is our overarching approach for managing operational risk, the purpose of which is to:

- Identify and manage our operational risks in an effective manner
- Remain within the operational risk appetite, which helps the organisation understand the level of risk it is willing to accept
- Drive forward-looking risk awareness and assist management focus during 2016

Business managers throughout the organisation are responsible for maintaining an acceptable level of internal control commensurate with the scale and nature of operations, and for identifying and assessing risks, designing controls and monitoring the effectiveness of these controls. The ORMF helps managers to fulfil these responsibilities by defining a standard risk assessment methodology and providing a tool for the systematic reporting of operational loss data.

A centralised database is used to record the results of the operational risk management process. Operational risk and control self-assessments are input and maintained by business units. Business and functional management and business risk and control managers monitor the progress of documented action plans to address shortcomings. To ensure that operational risk losses are consistently reported and monitored at Group level, all Group companies are required to report individual losses when the net loss is expected to exceed USD10,000, and to aggregate all other operational risk losses under USD10,000. Losses are entered into the Group Operational Risk database and are reported to the Risk Management Meeting on a monthly basis.

Activities to strengthen our risk culture and better embed the use of the ORMF was further implemented in 2016. In particular, the use of the activity-based 'three lines of defence' model, which sets out roles and responsibilities for managing operational risks on a daily basis.

#### *Exposures* (Unaudited)

HASE continues to strengthen those controls that manage our most material risks:

- Further embedding Global Standards to ensure that we know and protect our customers, ask the right questions and escalate concerns.
- Increased monitoring and enhanced detective controls to manage those fraud risks which arise from new technologies and new ways of banking.
- Strengthening internal security controls to prevent cyber-attacks:  
The cyber threat remains a major concern in the financial industry and it continues to rapidly evolve. Their attacks are becoming increasingly well organized, planned and sophisticated. Cyber criminals seek financial gains through compromising bank and customer information and launch disruption to banking services. Unauthorized access to bank systems by hackers may result in financial and reputational losses, increased regulatory scrutiny which could adversely affect confidence of customers and investors in Hang Seng Bank.  
The security of our information and technology infrastructure is crucial for maintaining our banking applications and processes, and protecting our customers and the Bank. We continue to work together with regulators, law enforcement agencies and our Group to keep abreast of the market intelligence on cyber threat. We will keep on strengthening our ability to prevent, detect and manage cyber-attacks through enhancing our technology infrastructure, governance, process and controls.
- Enhancing internal controls over unauthorized access to systems:  
The Bank has identified deficiencies in the design and operational effectiveness of controls over individuals access rights to IT operating systems, applications, and databases used in the financial reporting process. Through a group-wide remediation programme in 2016 we have achieved significant improvement in a number of areas. As a result effective mitigating IT, business, monitoring and period-end controls were in place for 2016.
- Improve controls and security to protect customers when using digital channels.

## **Management Discussion and Analysis** *(continued)*

*(Figures expressed in millions of Hong Kong dollars unless otherwise indicated)*

### **Capital Management**

*(audited)*

The Group's objective for managing capital is to maintain a strong capital base to support the development of its business and to meet regulatory capital requirements at all times. The Group recognises the impact of different level of equity capital on shareholder returns and seeks to maintain a prudent balance between advantages and flexibility provided by a strong capital position and higher returns on equity through greater leverage.

An annual Group capital plan is prepared and approved by the Board with the objectives of maintaining an optimal amount of capital and a suitable mix between different components of capital. The Group manages its own capital within the context of the approved annual capital plan, which determines level of risk-weighted asset ("RWA") growth as well as the optimal amount and components of capital required to support planned business growth. As part of the Group's capital management policy, subsidiary with capital generated in excess of planned requirement will return to the Bank, normally by way of dividends. The Group also raised subordinated debt in accordance with HSBC Group's guidelines regarding market and investor concentration, cost, market conditions, timing and maturity profile.

The Bank is primarily a provider of equity capital to its subsidiaries. These investments are substantially funded by the Bank's own capital and profit. The Bank seeks to maintain a prudent balance between the composition of its capital and that of its investment in subsidiaries.

The principal forms of capital are included in the following balances on the consolidated balance sheet: called up share capital, retained profits, other equity instruments, other reserves and subordinated liabilities. Capital also includes the collectively impairment allowances and regulatory reserve for general banking risks as allowed under Banking (Capital) Rules.

#### **Externally imposed capital requirements**

*(audited)*

The HKMA supervises the Group on a consolidated and solo-consolidated basis and, as such, receives information on the capital adequacy of, and sets capital requirements for, the Group as a whole. Individual banking subsidiaries are directly regulated by their local banking supervisors, who set and monitor their capital adequacy requirements. Certain non-banking financial subsidiaries are also subject to the supervision and capital requirements of local regulatory authorities.

The Group uses the advanced internal ratings-based approach ("IRB") to calculate its credit risk for the majority of its non-securitisation exposures. For market risk, the Group uses an internal models approach to calculate its general market risk for the risk categories of interest rate and foreign exchange (including gold) exposures and the standardised (market risk) approach for calculating other market risk positions. For operational risk, the Group uses the standardised (operational risk) approach to calculate its operational risk.

During the year, the Group has complied with all of the externally imposed capital requirements by the HKMA.

#### **Basel III**

*(unaudited)*

The Basel III rules set out the minimum capital requirements, to be phased in sequentially from 1 January 2013, becoming fully effective on 1 January 2019 with ultimate CET1 capital ratio and capital conservation buffer minimum requirements at 4.5% and 2.5% respectively. In addition to the criteria detailed in the Basel III proposals, the BCBS issued further minimum requirements in January 2011 to ensure that all classes of capital instruments are able to absorb losses at the point of non-viability before taxpayers are exposed to loss. Instruments issued on or after 1 January 2013 may only be included in regulatory capital if the new requirements are met. The capital treatment of instruments issued prior to this date that meet the grandfathering conditions will be phased out over a 10-year period commencing on 1 January 2013.

The Banking (Capital) (Amendment) Rules 2012, effective on 1 January 2013, signified the first phase of Basel III requirements in Hong Kong. The changes in minimum capital ratio requirements are phased in from 1 January 2013 to 1 January 2019, while the capital treatment for counterparty credit risk is effective from 1 January 2013.

## Management Discussion and Analysis (continued)

### Capital Management (continued)

#### Basel III (continued) (unaudited)

The Banking (Capital) (Amendment) Rules 2014 came into effect on 1 January 2015 to implement the Basel III capital buffer requirements in Hong Kong. The changes include the phasing-in from 2016 to 2019 of the Capital Conservation Buffer ("CCB") which is designed to ensure banks build up capital outside periods of stress of 2.5% of RWAs, the Countercyclical Capital Buffer ("CCyB") which is set on an individual country basis and is built up during periods of excess credit growth to protect against future losses, and the Higher Loss Absorbency ("HLA") requirements for Domestic Systemically Important Banks ("D-SIB"). On 27 January 2015, 14 January 2016 and 27 January 2017, the HKMA announced a CCyB for Hong Kong of 0.625%, 1.25% and 1.875% of RWAs from 1 January 2016, 1 January 2017 and 1 January 2018 respectively. The increase follows the Basel III phase-in arrangement for the CCyB. On 16 March 2015, the HKMA announced its designation of the Bank as a D-SIB in Hong Kong and required the Bank to establish 0.375% of RWAs for HLA from 1 January 2016. On 31 December 2015 and 30 December 2016, the HKMA confirmed the designation of the Bank as a D-SIB and required the Bank to establish 0.75% and 1.125% of RWAs for HLA from 1 January 2017 and 1 January 2018 respectively under the phase-in arrangement, equivalent to 1.5% on full implementation.

#### Leverage ratio (unaudited)

The leverage ratio was introduced into the Basel III framework as a non-risk-based backstop limit, to supplement risk-based capital requirements. It aims to constrain the build-up of excess leverage in the banking sector, introducing additional safeguards against model risk and measurement errors. The ratio is a volume-based measure calculated as Basel III tier 1 capital divided by total on- and off-balance sheet exposures. Basel III provides for a transitional period for the introduction of this ratio, comprising a supervisory monitoring period that started in 2011 and a parallel run period from January 2013 to January 2017. The parallel run will be used to assess whether the proposed minimum ratio of 3% is appropriate, with a view to migrating to a Pillar 1 requirement from 1 January 2018.

#### Capital base (unaudited)

The following tables show the capital base, RWAs, capital ratios and capital buffers as contained in the "Capital Adequacy Ratio" return required to be submitted to the HKMA by the Bank on consolidated basis as specified by the HKMA under the requirements of section 3C(1) of the Banking (Capital) Rules.

The Bank and its subsidiaries maintain a regulatory reserve to satisfy the provisions of the Banking Ordinance and local regulatory requirements for prudential supervision purposes. At 31 December 2016, the effect of this requirement is to restrict the amount of reserves which can be distributed to shareholders by HK\$5,945 million (31 December 2015: HK\$6,610 million).

## Management Discussion and Analysis (continued)

### Capital Management (continued)

#### Capital base (continued)

The following table sets out the composition of the Group's capital base under Basel III at 31 December 2016 and 31 December 2015. A more detailed breakdown of the capital position is available in the Regulatory Disclosures section of our website [www.hangseng.com](http://www.hangseng.com).

	2016	2015
<b>Common Equity Tier 1 ("CET1") Capital</b>		
Shareholders' equity	<b>117,870</b>	120,963
- Shareholders' equity per balance sheet	<b>140,626</b>	141,981
- Additional Tier 1 ("AT1") perpetual capital instrument	<b>(6,981)</b>	(6,981)
- Unconsolidated subsidiaries	<b>(15,775)</b>	(14,037)
Non-controlling interests	-	-
- Non-controlling interests per balance sheet	<b>60</b>	-
- Non-controlling interests in unconsolidated subsidiaries	<b>(60)</b>	-
Regulatory deductions to CET1 capital	<b>(30,103)</b>	(30,687)
- Cash flow hedging reserve	<b>48</b>	(11)
- Changes in own credit risk on fair valued liabilities	<b>(14)</b>	(6)
- Property revaluation reserves <sup>1</sup>	<b>(23,304)</b>	(23,135)
- Regulatory reserve	<b>(5,945)</b>	(6,610)
- Intangible assets	<b>(407)</b>	(421)
- Defined benefit pension fund assets	<b>(37)</b>	(35)
- Deferred tax assets net of deferred tax liabilities	<b>(158)</b>	(115)
- Valuation adjustments	<b>(286)</b>	(354)
<b>Total CET1 Capital</b>	<b>87,767</b>	90,276
<b>AT1 Capital</b>		
Total AT1 capital before and after regulatory deductions	<b>6,981</b>	6,981
- Perpetual capital instrument	<b>6,981</b>	6,981
<b>Total AT1 Capital</b>	<b>6,981</b>	6,981
<b>Total Tier 1 ("T1") Capital</b>	<b>94,748</b>	97,257
<b>Tier 2 ("T2") Capital</b>		
Total T2 capital before regulatory deductions	<b>16,009</b>	15,746
- Term subordinated debt	<b>2,327</b>	2,325
- Property revaluation reserves <sup>1</sup>	<b>10,487</b>	10,411
- Impairment allowances and regulatory reserve eligible for inclusion in T2 capital	<b>3,195</b>	3,010
Regulatory deductions to T2 capital	<b>(915)</b>	(315)
- Significant capital investments in unconsolidated financial sector entities	<b>(915)</b>	(315)
<b>Total T2 Capital</b>	<b>15,094</b>	15,431
<b>Total Capital</b>	<b>109,842</b>	112,688

<sup>1</sup> Includes the revaluation surplus on investment properties which is reported as part of retained profits and related adjustments made in accordance with the Banking (Capital) Rules issued by the HKMA.

## Management Discussion and Analysis (continued)

### Capital Management (continued)

#### Risk-weighted assets by risk type

(unaudited)

	2016	2015
Credit risk		
Standardised approach	47,917	41,834
IRB approach	419,751	401,539
Central Clearing Counterparty	4	4
Credit Valuation Adjustment	2,371	3,376
Market risk	7,354	13,698
Operational risk	50,871	49,023
Total	<u>528,268</u>	<u>509,474</u>

#### Market risk-weighted assets

(unaudited)

	2016	2015
Internal models approach		
Value at Risk ("VAR")	3,146	3,553
Stressed VAR	4,199	8,811
Standardised approach		
Specific interest rate exposures	9	1,334
Equity exposures	-	-
Total	<u>7,354</u>	<u>13,698</u>

#### Capital ratios (as a percentage of risk-weighted assets)

(unaudited)

The capital ratios on consolidated basis calculated in accordance with the Banking (Capital) Rules are as follows:

	2016	2015
CET1 capital ratio	16.6%	17.7%
T1 capital ratio	17.9%	19.1%
Total capital ratio	20.8%	22.1%

The Basel III rules set out the minimum capital requirements, to be phased in sequentially from 1 January 2013 and become fully effective on 1 January 2019. On a pro-forma basis that takes no account of, for example, any future profits or management action and any change in the current regulations or their application before full implementation, the Group's capital ratios at Basel III end point are the same as above as at 31 December 2016. The pro-forma Basel III end point basis position is a mechanical application of the current rules to the capital base as at 31 December 2016, it is not a projection.

In addition, the capital ratios of all tiers as of 31 December 2016 would be reduced by approximately 1% after the prospective fourth interim dividend payment for 2016. The following table shows the pro-forma basis position of the capital ratios after the prospective interim dividend.

	Pro-forma 2016	Pro-forma 2015
CET1 capital ratio	15.6%	15.7%
T1 capital ratio	16.9%	17.1%
Total capital ratio	19.8%	20.1%

## Management Discussion and Analysis (continued)

### Capital Management (continued)

#### Capital buffers (as a percentage of risk-weighted assets)

(unaudited)

With effect from 1 January 2016, the following capital buffers are phased-in and the applicable ratios to the Group on a consolidated basis are as follows:

	At 31 December 2016
Capital conservation buffer ratio	0.625%
Countercyclical capital buffer ("CCyB") ratio	0.543%
Higher loss absorbency ratio	0.375%
Total	<u>1.543%</u>

The geographical breakdown of RWAs in relation to private sector credit exposures and the applicable CCyB ratio for each jurisdiction using the standard template as specified by the HKMA can be viewed in the Regulatory Disclosures section of our website [www.hangseng.com](http://www.hangseng.com).

#### Principal subsidiaries and basis of consolidation

(unaudited)

The basis of consolidation for financial accounting purposes is in accordance with Hong Kong Financial Reporting Standards ("HKFRS"), as described in note 1 to the financial statements.

The basis of consolidation for regulatory purposes is different from that for accounting purposes. Subsidiaries included in the consolidation for regulatory purposes are specified in a notice from the HKMA in accordance with section 3C(1) of the Banking (Capital) Rules.

Subsidiaries not included in consolidation for regulatory purposes are securities and insurance companies that are authorised and supervised by a regulator and are subject to supervisory arrangements regarding the maintenance of adequate capital to support business activities comparable to those prescribed for authorised institutions under the Banking (Capital) Rules and the Banking Ordinance. The capital invested by the Group in these subsidiaries is deducted from the capital base as determined in accordance with Part 3 of the Banking (Capital) Rules.

A list of these subsidiaries is shown below:

	Principal activities	2016		2015	
		Total assets*	Total equity*	Total assets*	Total equity*
Hang Seng Futures Ltd	Futures brokerages	102	102	102	102
Hang Seng Investment Management Ltd	Fund management	1,266	1,248	946	910
Hang Seng Investment Services Ltd	Provision of investment commentaries	9	9	9	9
Hang Seng Securities Ltd	Stockbroking	2,340	1,355	2,493	1,596
Hang Seng Insurance Co. Ltd and its subsidiaries	Retirement benefits and life assurance	122,228	8,941	112,857	9,139
Hang Seng Qianhai Fund Management Co. Ltd	Asset management	205	198	-	-

\* Prepared in accordance with HKFRS

For insurance entities, the figures shown above exclude deferred acquisition cost assets as these are derecognised for consolidation purpose due to the recognition of the present value of in-force long-term insurance business ('PVIF') on long-term insurance contracts and investment contracts with discretionary participation features at group level. The PVIF asset of HK\$13,664m (2015: HK\$11,431m) and the related deferred tax liability, however, are recognised at the consolidated group level only, and are therefore also not included in the asset or equity positions for the standalone entities shown above.

As at 31 December 2016, there are no subsidiaries which are included within both the accounting scope of consolidation and the regulatory scope of consolidation but the method of consolidation differs.

There are also no subsidiaries which are included within the regulatory scope of consolidation but not included within the accounting scope of consolidation.

The Group operates subsidiaries in different territories where capital is governed by local rules and there may be restrictions on the transfer of regulatory capital and funds between members of the Group.

## Management Discussion and Analysis (continued)

### Capital Management (continued)

#### Capital instruments (unaudited)

The following is a summary of the Group's CET1, AT1 and T2 capital instruments issued by the Bank.

	<b>Amount recognised in regulatory capital</b>	
	<b>2016</b>	2015
<b>CET1 capital instruments</b>		
Ordinary shares:		
1,911,842,736 issued and fully paid ordinary shares	<b>9,658</b>	9,658
<b>AT1 capital instruments</b>		
Perpetual capital instrument (nominal value: US\$900m)	<b>6,981</b>	6,981
<b>T2 capital instruments</b>		
Subordinated loan due 2022 (nominal value: US\$300m)	<b>2,327</b>	2,325

A description of the main features and the full terms and conditions of the Group's capital instruments can be found in the Regulatory Disclosures section of our website [www.hangseng.com](http://www.hangseng.com).

#### Leverage ratio (unaudited)

The Group is required under section 45A(6) of the Banking (Disclosure) Rules to disclose its leverage ratio calculated on a consolidated basis.

	<b>2016</b>	2015
Leverage ratio	<b>7.4%</b>	7.8%
T1 capital	<b>94,748</b>	97,257
Exposure measure	<b>1,288,039</b>	1,248,642

The decrease in leverage ratio during the year is mainly due to the combined effect of an increase in exposure and a decrease in T1 capital, mainly attributed to the payment of special interim dividend for 2015 and partly offset by the profit retained in 2016.

Detailed breakdown of the Group's leverage exposure measure and a summary comparison table reconciling the assets of the Group's accounting balance sheet with the leverage exposure measure using the standard templates as specified by the HKMA can be viewed in the Regulatory Disclosures section of our website [www.hangseng.com](http://www.hangseng.com).

#### Additional information

A full reconciliation between the Group's accounting and regulatory balance sheets can be viewed in the Regulatory Disclosures section of our website [www.hangseng.com](http://www.hangseng.com).



## **CORPORATE SUSTAINABILITY**

We contribute to prosperity and growth by helping to reinforce Hong Kong's status as an international financial centre and providing our customers with the services and advice they need to achieve their financial goals.

We recognise that our ability to inspire positive community action and help individuals from all walks of life realise their potential is integral to our sustainable growth strategy and our position as the leading domestic bank in Hong Kong. With a particular focus on young people, our corporate sustainability programmes facilitate greater social mobility, encourage new ideas and provide opportunities for life-changing experiences.

### **Realising a Positive Future**

As a good corporate citizen, we lead by example in working towards positive community change, promoting social inclusion and civic pride, and proactively addressing sustainability challenges.

In 2016, we marked our 15<sup>th</sup> consecutive year as a constituent member of the FTSE4Good Global Index. We are the only local bank in Hong Kong that has been a constituent stock of the Dow Jones Sustainability Asia Pacific Index for six consecutive years and we have been a constituent member of the Hang Seng Corporate Sustainability Index series since its establishment in 2010.

Compiled with reference to the Global Reporting Initiative's G4 sustainability reporting guidelines, our Corporate Sustainability Report 2015 was named the '2016 Grand Winner – Best of Annual Reports' and received a Gold Award (Annual Reports – Online Sustainability Report Category) in the international Galaxy Awards that recognise excellence in marketing communications.

In 2011, we became the first domestic bank in Hong Kong to achieve ISO 14001 certification for the environmental management system across our entire network of offices and branches.

Two of our youth development programmes were recognised at the 12<sup>th</sup> China Golden Awards for Excellence in Public Relations, organised by the China International Public Relations Association. After being awarded top honours for the Hang Seng – HKFWS Youth Mediation Scheme, we now lead the way among Hong Kong corporations for the number of Gold Awards received at this biennial event. We also received a Silver Award for our Hang Seng Call for Young Talent in Theatre programme.

Over the past 10 years, we have invested HK\$268m in community development programmes in Hong Kong, including HK\$26m in 2016. We invest non-financial resources such as volunteer time, professional expertise and practical support to ensure these programmes foster lasting positive social and environmental change.

### **A Bridge to the Local Community**

Our staff are our internal stakeholders, the public face of Hang Seng and members of the community we serve. In addition to driving our business success, they play a primary role in demonstrating and disseminating our core values and sustainability principles. We recognise and reward talent by offering competitive compensation packages and by taking steps to help our people pursue their personal interests and enjoy a good work-life balance.

In 2016, about 18,500 colleagues and their families and friends took part in a variety of Bank-organised recreational activities designed to help them keep healthy, develop closer personal relationships and build a stronger sense of community pride. Close to 1,000 members of staff and their invited guests were on hand to applaud the vocal talents of around 100 contestants who participated in the biennial Hang Seng Singing Contest, and more than 1,000 employees took part in six sporting competitions that were organised under the Hang Seng Cup. At a CSR forum in October, 240 colleagues learned more about the health and environmental benefits of vegetarian and plant-based diets from Mr David Yeung, co-founder of Green Monday.

## **Empowering Young People**

The principles and passions of today's younger generations will determine the future direction of our city's development. Working with trusted local partners, we aim to inform, empower and inspire young people to become agents of positive change – in their own lives, among their peers and as part of the Hong Kong community.

In 2016, our diverse range of youth development programmes provided over half a million young people with opportunities to explore their talents and interests, develop new skills and greater self-esteem, and participate in experiences that broaden horizons, drive ambition and positively change lives.

Organised in partnership with the Hong Kong Federation of Youth Groups and the Hong Kong Repertory Theatre, our award-winning Hang Seng Call for Young Talent in Theatre programme helps participants build self-confidence through artistic expression and working as part of a group. Following open auditions, over 40 primary and secondary school students were selected to take part in the programme, which culminated in four public performances of the original musical 'Our Time, Our Hong Kong' for a total of around 1,600 people.

The Hang Seng – HKFWS Youth Mediation Scheme aims to build a more harmonious society by promoting peer mediation as an effective tool for conflict resolution. Organised in partnership with the Hong Kong Family Welfare Society, the Scheme has trained close to 1,000 primary school peer mediators. Over 34,000 participants – including parents and teachers – have been introduced to the principles and practice of peer mediation since the Scheme's launch in 2013.

The Hang Seng Youth Entrepreneurship Scheme, run in collaboration with The Society of Rehabilitation and Crime Prevention, Hong Kong, offers at-risk youths and young ex-offenders a platform for regaining confidence in their future through entrepreneurship. Participants can apply for subsidies to kick-start a small business and have access to entrepreneurial training and expert business advice. Bank executives have volunteered their time as guest speakers to share their professional insights and experience and to help judge the participants' business proposals. More than 400 young people will have benefitted from the Scheme by mid-2017.

As part of our efforts to enhance social mobility, we have been working with the Hong Kong Federation of Youth Groups to pioneer the 'gap year' concept among secondary school students in Hong Kong through the Hang Seng GPS Youth Employment Programme. The Programme offers low academic achievers an opportunity to experience the world of work and explore potential future careers. Participants are assigned job placements that are matched to their interests and will receive a certificate and a further education or training subsidy upon successful completion. Members of the Bank's recruitment team provide practical support by conducting mock job interviews with the participants. Over 60 students have taken part in the Programme since its launch in 2014.

In the Pearl River Delta region, we supported Junior Achievement China's 2016 – 2017 China Youth Financial Literacy Education Programme, which aims to help students enhance their financial management knowledge and planning skills through various courses and workshops.

Since 1995, we have allocated more than HK\$65m to various scholarship schemes in Hong Kong and mainland China, benefitting over 2,400 students.

## **A Long-term Commitment to Sporting Success**

Since 1991, we have provided HK\$57m to support the development of table tennis, reflecting our commitment to promoting healthy lifestyles and our belief in the power of sport to bring people together in a shared sense of teamwork and community pride.

We marked two key milestones in 2016 – 25 years of partnership with the Hong Kong Table Tennis Association and the 15<sup>th</sup> anniversary of the Hang Seng Table Tennis Academy (HSTTA). As part of its

community outreach work, the Academy has organised nearly 5,600 events that have collectively benefitted over 310,000 people. We produced two videos to celebrate HSTTA's 15<sup>th</sup> anniversary and the efforts of the Hong Kong Table Tennis team at the Rio 2016 Olympics Games respectively, which have collectively reached nearly 730,000 people across various social media platforms. The 15<sup>th</sup> anniversary video also received an Honours Award at the internationally renowned Galaxy Awards.

### **A Creative Way to Build a Thriving Community**

Realising a positive future for our community will require inquiring minds and creative thinking. Our support for initiatives such as the Ming Pao Student Reporter Programme, the UNICEF HK Make a Video Contest and the Hang Seng Bank – Help the Police Fight Youth Crime Competition reflects our belief in the importance of attributes such as good communication, analytical skills and an inclusive outlook in nurturing well-rounded citizens of tomorrow.

Exposure to the arts can fuel the imagination and spark positive discussion and debate. Under the Hang Seng Bank Student Matinee & Community Performance programme, organised in partnership with The Hong Kong Repertory Theatre, more than 900 secondary school students and members of the public attended two exclusive Bank-sponsored performances of 'Footprints in the Snow'. Post-performance talks gave attendees a chance to learn more about the production and get behind-the-scenes insights into what it takes to stage a play.

Over 3,000 students from 84 secondary schools took part in the Hang Seng – Jao Tsung-I Academy Historical and Cultural Programme, which uses a photo exhibition and a range of participatory historical and cultural activities to provide young people with a deeper understanding of the broader context of Hong Kong's development.

Through student ticket and subsidy schemes, we helped over 10,000 students and underprivileged children attend performances by the Hong Kong Philharmonic Society and the Hong Kong String Orchestra as well as a variety of Hong Kong Arts Festival events in 2016.

### **Extending a Culture of Service Excellence**

We extend our culture of service excellence into the wider community through our volunteer and social development activities. We understand that healthy, inclusive and caring societies should assist their most vulnerable and underprivileged members while also championing success.

Bank volunteers participated in a wide variety of community-focused and philanthropic activities during 2016, including assisting St James' Settlement with its Meal Box Delivery Service, which packages and delivers hot meals to underprivileged elderly people and families in several low-income districts in Hong Kong.

Leveraging the core competencies of our staff, we are helping to enhance financial literacy across all social strata in Hong Kong, including through our participation in the Financial Education programme organised by the Hong Kong Association of Banks and the Hong Kong Council of Social Service, which provides advice on financial management strategies to individuals from low-income groups.

Our long-term support for the Hang Seng – Regeneration Society Top Ten Regeneration Warriors Competition helps promote the value of adopting a positive outlook and affirming life values when facing significant challenges. The competition gives members of the public a chance to learn from the experiences of 10 Regeneration Warriors who are successfully dealing with serious chronic illnesses by maintaining a positive approach and 'can-do' attitude in their everyday lives.

We have been a close partner of The Community Chest of Hong Kong since 1994, raising nearly HK\$73m – including HK\$23m through the Chest's annual Dress Casual Day campaign. Since 2001, we have facilitated charitable giving totaling more than HK\$33m by customers through our e-Donation channel.

## Environment

Our work to conserve natural resources and nurture a greater sense of environmental responsibility includes enhancing our own environmental performance, raising environmental awareness among our stakeholders, and participating in initiatives to address global issues that require a broad-based response.

We promote green messages among our internal and external stakeholders through various channels, including training and volunteer activities. Nearly 23 million e-Statements and e-Advice notices were generated in 2016, which collectively saved 53 million sheets of paper. We also supported various environmental initiatives such as the Friends of the Earth (HK) ‘Power Smart’ Energy Saving Contest and WWF (Hong Kong)’s Earth Hour.

For almost a decade, we have partnered with The Conservancy Association to promote the benefits of renewable energy and provide biogas facilities to rural communities in Yunnan province on the Mainland. Since 2007, the Hang Seng Yunnan Biogas Project has constructed 4,600 biogas facilities that collectively provide clean and free energy to nearly 18,000 people. To mark the 10<sup>th</sup> anniversary of this project in 2017, we are supporting the construction of a low-carbon village in the province.

We received the Joint Energy Saving Award and the Gold Award in the Retail & Service – Chain Store category at the 2016 CLP GREEN PLUS Recognition Award.

We stopped serving shark’s fin at Bank functions in 2003 and have since removed endangered reef fish species from our menus. We also provide a WWF (Hong Kong)-endorsed sustainable seafood menu at our banquet hall.

<b>Environmental Performance</b>	<b>2016<sup>#</sup></b>	<b>2015<sup>^</sup></b>	<b>2016 vs 2015 (% change)</b>
Greenhouse gas emissions (kilotonnes CO <sub>2</sub> )	<b>24.27</b>	25.91	<b>-6.33</b>
Electricity consumption (GWh)	<b>36.65</b>	36.43	<b>+0.6</b>
Water consumption (000m <sup>3</sup> )	<b>69.80</b>	66.91	<b>+4.32</b>
IT/ electrical waste recycled (tonnes)	<b>47.22</b>	41.06	<b>+15</b>

Data coverage: Hang Seng Bank’s Hong Kong operations

Key: CO<sub>2</sub>: carbon dioxide

GWh: gigawatt hours

m<sup>3</sup>: cubic metres

<sup>#</sup> From 1 Oct 2015 - 30 Sep 2016

<sup>^</sup> From 1 Oct 2014 - 30 Sep 2015

## **Recognition**

### **Constituent Stock of Dow Jones Sustainability Asia Pacific Index**

*(6<sup>th</sup> consecutive year)*

Dow Jones Sustainability Index

### **Constituent Stock of FTSE4Good Global Index**

*(15<sup>th</sup> consecutive year)*

FTSE Index

### **Constituent Stock of Hang Seng Corporate Sustainability Index Series**

*(7<sup>th</sup> consecutive year)*

Hang Seng Indexes

### **Constituent Stock of Hong Kong Business Sustainability Index**

*(since its establishment in 2015)*

The Hong Kong Polytechnic University, Hong Kong Council of Social Services and Hong Kong Productivity Council

### **Caring Company**

*(14<sup>th</sup> consecutive year)*

Hong Kong Council of Social Service

### **Junzi Corporation Award**

*(6<sup>th</sup> consecutive year)*

Hang Seng Management College

## **Sustainability Initiatives**

### **Giving Young People a Chance to Shine**

Participation in the arts has the power to transform young lives and local communities. Now in its second year, the Hang Seng Call for Young Talent in Theatre programme opens up new horizons for young people by encouraging creative expression and greater self-confidence. During two months of training to hone their dramatic skills, participating students learn the importance of stepping outside their comfort zone and putting characteristics such as collaboration, communication and commitment centre stage in working to achieve their dreams.

### **Nurturing a More Harmonious Society**

The award-winning Hang Seng – HKFWS Youth Mediation Scheme reflects our belief that good communication plays a crucial role in positive conflict resolution and successfully overcoming challenges. Primary schools across Hong Kong are invited to join the Scheme, which trains students to become Peer Mediators who use their skills to facilitate greater understanding and empathy in conflict situations. In addition to cultivating more young mediators, the Scheme trained 49 students from The Education University of Hong Kong and 24 Bank volunteers as Mediation Ambassadors in 2016/17 to provide support for primary school mediation programmes that run throughout the academic year.

### **Building a Healthy Community**

For a quarter of a century, we have worked in close partnership with the Hong Kong Table Tennis Association (HKTTA) to promote participation in sports as part of a healthy lifestyle and an effective way to encourage the development of a positive community spirit. The Hang Seng Table Tennis Academy we established in 2001 to nurture local sporting talent has produced a number of world-class athletes – including Wong Chun-ting, Doo Hoi-kem and Lee Ho-ching, who, as of February 2017, ranked 6<sup>th</sup>, 13<sup>th</sup> and 24<sup>th</sup> in the world respectively. These outstanding sporting stars serve as role models for young people and generate civic pride. The achievements of these athletes demonstrate the value of hard work, dedication and setting ambitious goals.

### **Demonstrating the Spirit of Service**

As part of our efforts to encourage Hang Seng staff to give back to the local community, our employees are able to take two days of volunteer leave per year to engage in charitable activities. Over the past five years, Bank volunteers and their family members have contributed over 100,000 hours in volunteer service, including through 110 Bank-organised activities in 2016. In recognition of the personal and team-building benefits that are gained through greater civic participation, various Bank departments organised departmental team volunteer activities in 2016, ranging from day trips to outlying islands with children from low-income families to moon-cake making and distribution to elderly people, and golf days with young people from ethnic minority groups.

# **CORPORATE GOVERNANCE REPORT**

## **CORPORATE GOVERNANCE PRINCIPLES AND PRACTICES**

Hang Seng Bank Limited (the “Bank”) is committed to maintaining and upholding high standards of corporate governance with a view to safeguarding the interests of shareholders, customers, employees and other stakeholders. The Bank has followed the module on “Corporate Governance of Locally Incorporated Authorised Institutions” under the Supervisory Policy Manual (“SPM”) issued by the Hong Kong Monetary Authority (“HKMA”). The Bank has also fully complied with all the code provisions and most of the recommended best practices set out in the Corporate Governance Code (“CG Code”) contained in Appendix 14 of the Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited (“HKEx”) (the “Listing Rules”). Further, the Bank constantly reviews and enhances its corporate governance framework, by making reference to market trend as well as guidelines and requirements issued by regulatory authorities, to ensure that it is in line with international and local corporate governance best practices.

## **BOARD OF DIRECTORS**

The Board has collective responsibilities for promoting the long-term sustainability and success of the Bank by providing entrepreneurial leadership within a framework of prudent and effective controls. In doing so, the Board commits to high standards of integrity and ethics.

According to the Board’s terms of reference, specific matters reserved for the Board’s consideration and decision include:

- strategic plan and objectives
- annual operating plan and performance targets
- annual and interim financial reporting
- capital plans and management
- risk appetite statement and profile update
- appointment and oversight of senior management
- internal control and risk management governance structure
- effective audit functions
- corporate values and standards
- policies, practices and disclosure on corporate governance
- policies and practices on compliance with legal and regulatory requirements
- significant policies and plans and subsequent changes
- acquisitions, disposals and purchases above predetermined thresholds

## **Chairman and Chief Executive**

The roles of the Chairman and Chief Executive of the Bank are complementary, but importantly, they are distinct and separate with a clear and well established division of responsibilities. Details of their respective roles are set out in the Board's terms of reference.

The Chairman of the Board, who is an Independent Non-executive Director ("INED"), is responsible for the leadership and effective running of the Board and for ensuring that decisions of the Board are taken on a sound and well-informed basis and in the best interest of the Bank. In addition, as the Chairman of the Board, he is also responsible for ensuring that all Directors are properly briefed on all issues currently on hand and receive adequate, accurate and reliable information in a timely manner. The Chairman possesses the requisite experience, competencies and personal qualities to fulfill these responsibilities.

The Chief Executive, who is an Executive Director ("ED"), is responsible for implementing the strategy and policy as established by the Board. The Chief Executive is also responsible for the management and day-to-day running of the Bank's business and operations, as well as leading and chairing the Executive Committee.

## **Board Composition**

As at the date of this Annual Report, the Board comprises 17 Directors, of whom three are EDs and 14 are Non-executive Directors ("NEDs"). Among the 14 NEDs, nine are INEDs. There is a strong independent element on the Board, to ensure the independence and objectivity of the Board's decision-making process as well as the thoroughness and impartiality of the Board's oversight of the Management.

The Board possesses, both as individual Directors and collectively, appropriate experience, competencies and personal qualities, including professionalism and integrity, to discharge its responsibilities adequately and effectively. In addition, the Board collectively has adequate knowledge and expertise relevant to each of the material business activities that the Bank pursues and the associated risks in order to ensure effective governance and oversight.

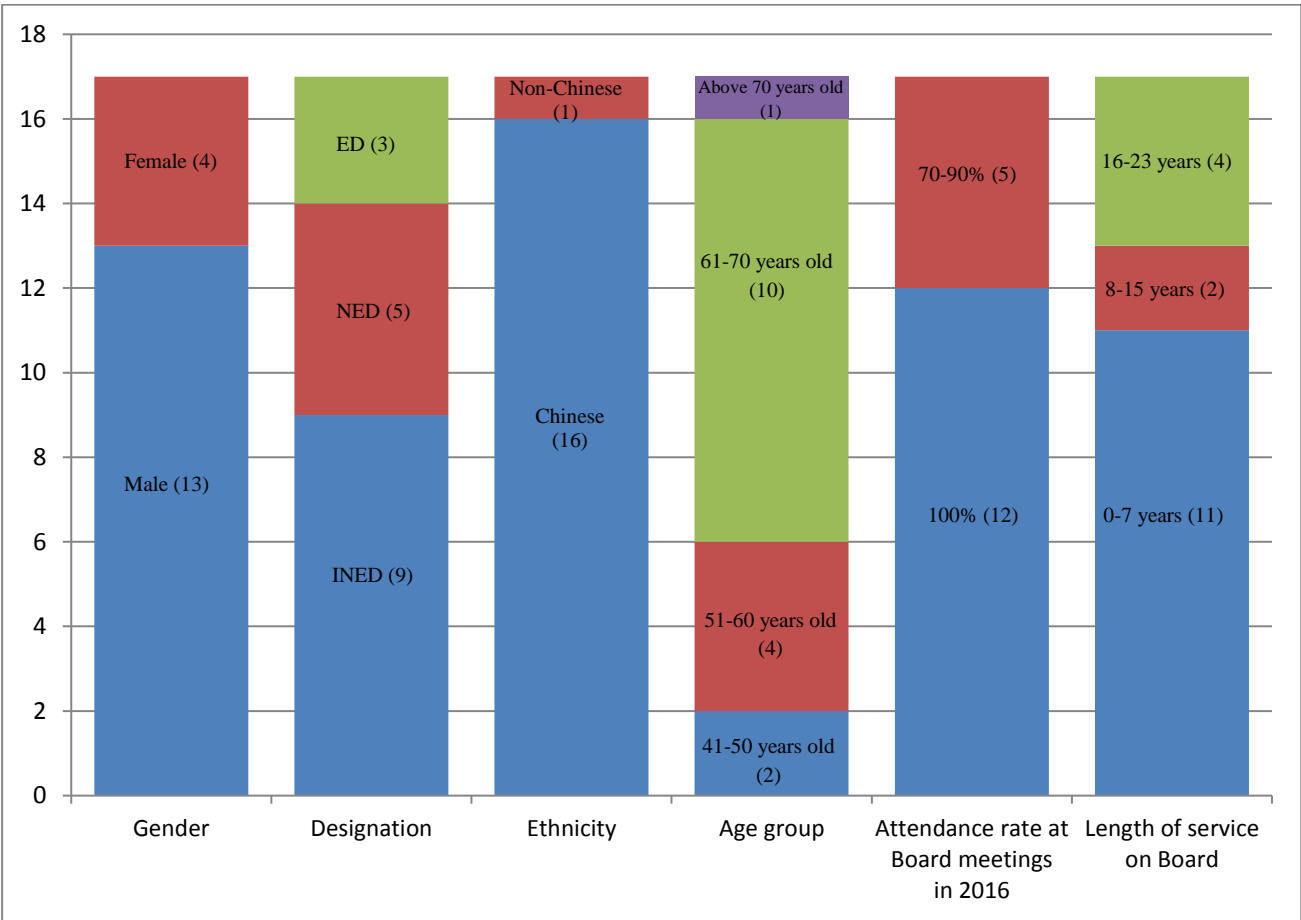
Members of the Board, who come from a variety of different backgrounds, have a diverse range of business, banking and professional expertise. Biographical details of the Directors, together with information relating to the relationship among them, are set out in the section "Biographical Details of Directors and Senior Management" in this Annual Report.

The Bank remains committed to meritocracy in the Boardroom, which requires a diverse and inclusive culture where Directors believe that their views are heard, their concerns are attended to and they serve in an environment where bias, discrimination and harassment on any matter are not tolerated. The Board has adopted a Board Diversity Policy which has been made available on the Bank's website ([www.hangseng.com](http://www.hangseng.com)) for better transparency and governance. Board appointments are based on merit and candidates are considered against objective criteria, having due regard for the benefits of diversity on the Board including, but not limited to, gender, age, cultural and educational background, ethnicity, professional experience, skills, knowledge and length of service.



An analysis of the Board’s current composition is set out in the following chart:

No. of Directors



The Bank has maintained on its website ([www.hangseng.com](http://www.hangseng.com)) and on the website of HKEx ([www.hkexnews.hk](http://www.hkexnews.hk)) an updated list of its Directors identifying their roles and functions and whether they are INEDs. INEDs are also identified as such in all corporate communications that disclose the names of the Bank’s Directors.

Further, the Bank has received from each of the INEDs an annual confirmation of his/her independence. The independence of the INEDs has been assessed in accordance with the guidelines set out in Rule 3.13 of the Listing Rules. Following such assessment, the Board has affirmed that all the INEDs continue to be independent.

**Board Process**

Board meetings shall be held about six times a year and no less than once every quarter. Additional Board meetings, or meetings of a Board committee established by the Board to consider specific matters, can be convened, when necessary.

Schedule for the regular Board meetings in each year, together with the standing agenda for such meetings, are made available to all Directors before the end of the preceding year. In addition, notice of meetings will be given to all Directors at least 14 days before each regular meeting.

Other than regular meetings, the Chairman also meets with NEDs (including INEDs) without the presence of EDs, to facilitate an open and frank discussion among the NEDs on issues relating to the Bank.

The Board also meets with the representatives of HKMA to maintain a regular dialogue with the regulator where HKMA shares with the Board industry-wide issues and HKMA's supervisory focus.

Meeting agenda for regular meetings are set after consultation with the Chairman and the Chief Executive. All Directors are given an opportunity to include matters in the agenda.

Directors make their best efforts to contribute to the formulation of strategy, policies and decision-making by attending the Board meetings in person or via telephone or video-conferencing facilities.

Minutes of Board meetings with details of the matters discussed by the Board and decisions made, including any concerns or views of the Directors, are kept by the Company Secretary and are open for inspection by Directors.

In addition to the regular financial and business performance reports submitted to the Board at its regular meetings, the Board also receives financial and business updates with information on the Bank's latest financial performance and material variance from the Bank's annual operating plan during those months where no Board meetings are held. Directors can therefore have a balanced and understandable assessment of the Bank's performance, position and prospects throughout the year.

The Board reviews and evaluates its work process and effectiveness annually, with a view to identifying areas for improvement and further enhancement. The Board also regularly reviews the time commitment required from NEDs.

All Directors have access to the EDs as and when they consider necessary. They also have access to the Company Secretary who is responsible for ensuring that Board procedures, and related rules and regulations, are followed.

Under the Articles of Association of the Bank, a Director shall not vote or be counted in the quorum in respect of any contract, arrangement, transaction or other proposal in which he/she or his/her associate(s), is/are materially interested.

The Board has adopted a Policy on Conflicts of Interest. The Policy identifies the relationships, services, activities or transactions in respect of which conflicts of interest may arise and sets out measures for prevention or management of such conflicts. The Policy also contains an objective compliance process for implementing the Policy, which includes notification by a Director of conflicts or potential conflicts, and a review/approval process.

The Board has been applying technology designed specifically around the Board to help the Directors manage their time more efficiently, while staying connected to the Board and other Directors in order to discharge their responsibilities effectively and securely.

During 2016, the Board held seven meetings (including one meeting with HKMA) and the important matters discussed at Board meetings included:

<p><b><u>Strategic Planning</u></b></p> <ul style="list-style-type: none"> <li>- strategic plan (2016 – 2018) with quarterly updates</li> <li>- annual review of strategic plan (2013 – 2015)</li> <li>- impact of major market developments, for example, Brexit and the US presidential election, and major regulatory changes on the Bank</li> </ul>	<p><b><u>Financial and Business Performance, and Capital Planning</u></b></p> <ul style="list-style-type: none"> <li>- financial statements for the year ended 31 December 2015</li> <li>- interim financial statements for the six months ended 30 June 2016</li> <li>- declaration of the fourth interim dividend for year 2015 and first three interim dividends for year 2016</li> <li>- annual operating plan and capital plan for year 2016</li> <li>- reports on financial and business performance</li> <li>- internal capital adequacy assessment process</li> <li>- individual liquidity adequacy assessment</li> </ul>
<p><b><u>Governance and Risk Management</u></b></p> <ul style="list-style-type: none"> <li>- global risk appetite framework addendum and risk appetite statement for 2016 with quarterly profile update</li> <li>- enterprise risk management framework implementation and internal control system assessment</li> <li>- outcome of HKMA’s supervisor-driven stress tests</li> <li>- annual review of money laundering reporting officer report</li> <li>- revision of the Code for Securities Transactions by Directors</li> <li>- review of large credit exposures and risk concentrations</li> <li>- significant policies and plans including, but not limited to, Recovery Plan, Contingency Funding Plan, Liquidity Management Policy, Connected Lending Policy, and Capital Management Policy</li> <li>- review of the Bank’s implementation of the guiding principles under HKMA’s Circular on De-risking and Financial Inclusion</li> <li>- renewal of certain continuing connected transactions and the entry into of a new connected transaction between an insurance subsidiary of the Bank and certain entities of HSBC Holdings plc (“HSBC Group”)</li> </ul>	<p><b><u>Compensation and Human Management</u></b></p> <ul style="list-style-type: none"> <li>- annual review of the remuneration policy and remuneration system</li> <li>- annual review of alignment of risk and remuneration</li> <li>- pay review for 2016 and variable pay for 2015</li> <li>- review of fees payable to Directors and Board Committee Chairmen/Members of the Bank and its subsidiaries</li> <li>- succession planning for the Board and senior management</li> <li>- re-designation of Director and appointment of senior executives</li> <li>- performance management relating to senior management</li> <li>- re-election of retiring Directors</li> <li>- terms of appointment of NEDs</li> <li>- review of independence of INEDs</li> <li>- annual review of the implementation of corporate values and business principles</li> </ul>

## **Appointment and Re-election of Directors**

The Bank uses a formal, considered and transparent procedure for the appointment of new Directors. Before a prospective Director's name is formally proposed, opinions of the existing Directors (including the INEDs) will be solicited. The proposed appointment will first be reviewed by the Nomination Committee, taking into account the balance of skills, knowledge and experience on the Board. Upon recommendation of the Nomination Committee, the proposed appointment will then be reviewed and, if thought fit, approved by the Board after due deliberation.

Pursuant to Group policy, the Bank will conduct enhanced vetting for non-employee NEDs before his/her appointment and thereafter once every three years, as one of the measures to verify the fitness and propriety of the NEDs.

In accordance with the requirement under the Banking Ordinance, approval from HKMA will also be obtained.

The Bank issues appointment letters to each of the NEDs, setting out the terms and conditions of their appointment, including the time commitment expected of them. Additional time commitment is necessary if the NEDs also serve on committee(s) of the Board.

All new Directors are subject to election by shareholders at the next Annual General Meeting ("AGM") after their appointments have become effective. Further, the Bank's Articles of Association provide that all Directors shall be subject to retirement by rotation at least once every three years. Retiring Directors are eligible for re-election at AGMs of the Bank.

According to the policy on the term of appointment of NEDs, term of appointment of each NED is three years except that where a NED has served on the Board for more than nine years, then his/her term of appointment is one year. In renewing the term of appointment of each NED, the Board reviews whether such NED remains qualified for his/her position.

## **Responsibilities of Directors**

All Directors have full and timely access to all relevant information about the Bank so that they can discharge their duties and responsibilities as Directors. In particular, through regular Board meetings and receipt of regular financial and business updates, all Directors are kept abreast of the conduct, business activities and development, as well as regulatory updates applicable to the Bank.

There are established procedures for Directors to seek independent professional advice on matters relating to the Bank where appropriate. All costs associated with obtaining such advice will be borne by the Bank. In addition, each Director has separate and independent access to the Bank's Management.

The Bank has adopted a Code for Securities Transactions by Directors on terms no less exacting than the required standards set out in the Model Code for Securities Transactions by Directors of Listed Issuers (set out in Appendix 10 to the Listing Rules) with periodic review. Specific enquiries have been made with all Directors who have confirmed that they have complied with the Bank's Code for Securities Transactions by Directors throughout the year 2016.

Directors' interests in securities of the Bank and HSBC Group as at 31 December 2016 have been disclosed in the Report of the Directors set out in this Annual Report.

Appropriate Directors' liability insurance cover has also been arranged to indemnify the Directors for liabilities arising out of corporate activities. The coverage and the sum insured under the policy are reviewed annually. Further, the Bank's Articles of Association provide that Directors are entitled to be indemnified out of the Bank's assets against claims from third parties in respect of certain liabilities.

### **Induction and Training for Directors**

Induction programmes on the following key areas will be arranged for newly appointed Directors so that they can discharge their responsibilities to the Bank properly and effectively:

- business operations
- risk management framework
- governance structure and practices
- control and support functions
- directors' duties and responsibilities

Further, all Directors are provided with briefings and trainings on an on-going basis as necessary to ensure that they have a proper understanding of the Bank's operations and business and are fully aware of their responsibilities under the applicable laws, rules and regulations. Such briefings and trainings are provided at the Bank's expense. The Bank also maintains proper records of the briefings and trainings provided to and received by its Directors.

In addition, all Directors are provided with a "Memorandum of Directors", which sets out the scope and nature of Directors' duties and liabilities, particulars of Group policies and local regulatory and statutory requirements of which the Directors must be aware. Such memorandum is updated from time to time so as to reflect the latest internal policies/guidelines, regulatory/statutory requirements, and best practices.

During the year, Directors received briefings and trainings on the following topics:

- Managing Cyber Risk Intelligently
- Trends and Updates on Credit Risk Regulations and Requirements : Impact on Banking and Finance Sector of Hong Kong and China
- Automatic Exchange of Financial Account Information: Implementation and its Compliance in Hong Kong
- Conduct Compliance
- Regulator's Perspective – Account Opening and Know-Your-Customer Information Collection
- Board Level Essentials on Cybersecurity Risk Management and Blockchain
- Total Loss Absorbing Capacity
- Impact of the Implementation of International Financial Reporting Standard 9 on "Financial instruments" ("IFRS9") and the Latest Regulatory Treatment of Loan Provisions
- HSBC Global Awareness Modules on anti-money laundering; sanctions; bribery and corruption; embedding good conduct; protecting our information; and rebuilding trust in banking

To summarise, the Directors received briefings and trainings on the following key areas to update and develop their skills and knowledge during the year:

Directors	Governance matters	Regulatory matters	Business/Management
<b>INEDs</b>			
Dr Raymond K F Ch'ien	√	√	√
Dr John C C Chan	√	√	√
Dr Henry K S Cheng	√	√	√
Ms L Y Chiang	√	√	√
Dr Fred Zulu Hu	√	√	√
Ms Irene Y L Lee	√	√	√
Dr Eric K C Li	√	√	√
Mr Richard Y S Tang	√	√	√
Mr Michael W K Wu	√	√	√
<b>NEDs</b>			
Mr Nixon L S Chan <sup>Note 1</sup>	√	√	√
Ms Sarah C Legg	√	√	√
Dr Vincent H S Lo	√	√	√
Mr Kenneth S Y Ng	√	√	√
Mr Peter T S Wong	√	√	√
<b>EDs</b>			
Ms Rose W M Lee	√	√	√
Mr Patrick K W Chan	√	√	√
Mr Andrew H C Fung	√	√	√

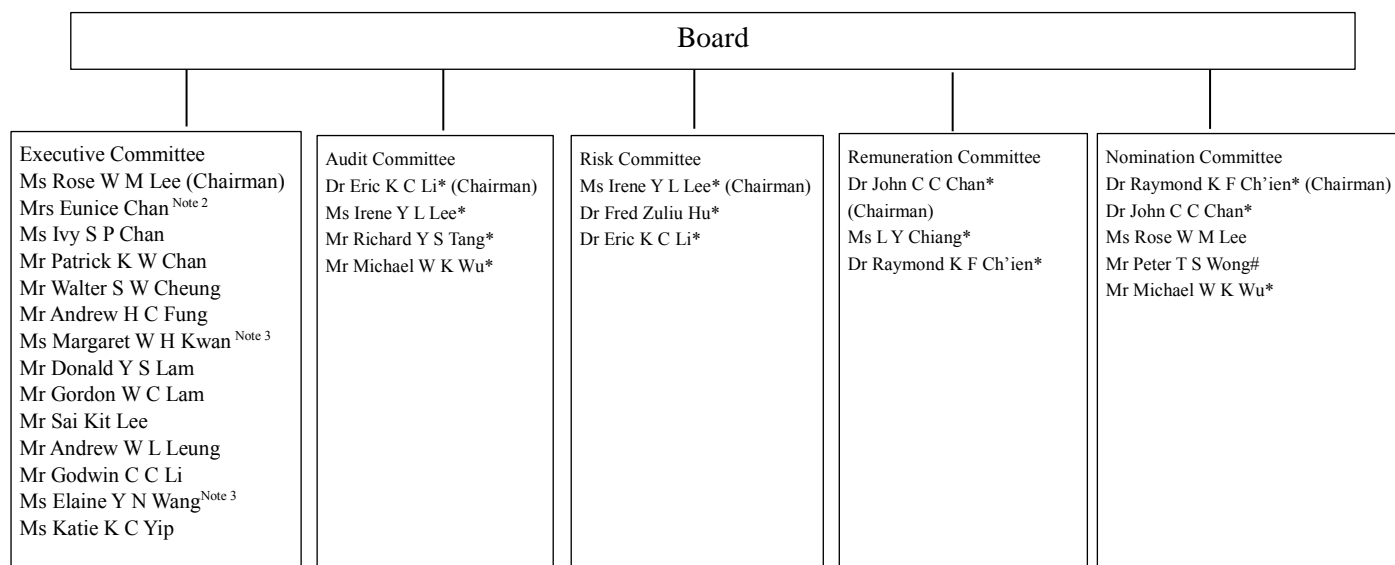
<sup>Note 1</sup> Mr Nixon L S Chan, previously an ED, was re-designated as a NED with effect from 1 July 2016.

## DELEGATION BY THE BOARD

### Board Committees

The Board has set up five Committees, namely, the Executive Committee, the Audit Committee, the Risk Committee, the Remuneration Committee and the Nomination Committee, to assist it in carrying out its responsibilities.

The current composition of the Board Committees is as follows:



\* INED  
 # NED

<sup>Note 2</sup> Mrs Eunice Chan was appointed as an Executive Committee member with effect from 1 March 2016.

<sup>Note 3</sup> Ms Margaret W H Kwan and Ms Elaine Y N Wang were appointed as Executive Committee members with effect from 1 July 2016.

Each of these Committees has specific written terms of reference, which set out in detail their respective authorities and responsibilities. Each Committee reviews its terms of reference and effectiveness annually. The terms of reference of all the Non-executive Board Committees have been made available on the Bank's website ([www.hangseng.com](http://www.hangseng.com)). All Committees, except the Executive Committee and Nomination Committee, comprise solely of INEDs. Majority of the Nomination Committee members are INEDs while the Executive Committee comprises the Bank's EDs and senior executives.

All Committees adopt the same governance processes as the Board as far as possible and report back to the Board on their decisions or recommendations on a regular basis.

## Executive Committee

The Executive Committee usually meets once a month and operates as a general management committee under the direct authority of the Board. It exercises the powers, authorities and discretions as delegated by the Board in so far as they concern the management and day-to-day running of the Bank in accordance with its terms of reference and such other policies and directives as the Board may determine from time to time. The Executive Committee also sub-delegates credit, investment and capital expenditure authorities to its members and senior executives.

To further enhance the Bank's risk management framework and in line with best practices, the Bank has set up a Risk Management Meeting ("RMM"), a risk meeting of the Executive Committee, to provide recommendations and advice to the Bank's Chief Risk Officer on enterprise-wide management of all risks, and policies and guidelines for the management of risk within the HASE Group. RMMs are usually held monthly. Minutes of RMMs are provided to the Executive Committee and the Risk Committee for review.

## **Audit Committee**

The Audit Committee meets at least four times a year with the Bank's executives including the Chief Executive, Chief Financial Officer, Chief Risk Officer, Head of Audit, and representatives from the Bank's external auditor. The Committee reviews, among other things, the Bank's financial reporting, the nature and scope of audit reviews, and the effectiveness of the systems of internal control and compliance relating to financial reporting. The Audit Committee is also responsible for making recommendations to the Board on the appointment, re-appointment, removal and remuneration of the Bank's external auditor. In addition, the Audit Committee has established a "Policy for the Reporting of Improprieties" to provide a secured and confidential channel through which all staff members may report incidents of improprieties on a strictly confidential basis so that the same can be timely and thoroughly investigated and appropriate actions can be taken promptly.

The Audit Committee reports to the Board following each Audit Committee meeting, drawing the Board's attention to significant issues or matters of which the Board should be aware, identifying any matters in respect of which it considers that action or improvement is needed, and making relevant recommendations.

During the year, the Audit Committee held five meetings and the major work performed by the Committee was as follows:

- reviewed the financial statements for the year ended 31 December 2015 and the related documents, and internal control recommendations and audit issues noted by the Bank's external auditor
- reviewed the interim financial statements for the six months ended 30 June 2016 and the related documents, and the issues noted by the Bank's external auditor
- reviewed the annual operating plan and capital plan for year 2016
- reviewed the balance sheet management position
- reviewed the revised accounting standards and prospective changes to accounting standards, in particular, the update on IFRS9 implementation, and the impact on the Bank's financial reporting
- reviewed the significant policies and plans including, but not limited to, Recovery Plan
- reviewed the internal audit reports and discussed the same with the Management and Head of Audit
- reviewed and adopted the revised Internal Audit Charter and enhanced Global Internal Audit Standards Manual
- reviewed the update on internal audit plan for 2016 and approved the internal audit plan for 2017
- reviewed the adequacies of resources, qualifications and experience of staff of the Accounting and Financial Reporting function and Internal Audit function, and their training programmes and budgets
- reviewed the remuneration and engagement letter of the Bank's external auditor, its independence and objectivity, and the effectiveness of the audit process
- reviewed the incidents reported under the Policy for the Reporting of Improprieties during the year
- reviewed the Audit Committee's independence and effectiveness in discharging its role and responsibilities, and its terms of reference



- reviewed and adopted the approach for the governance and interaction with the audit committees of the Bank's subsidiaries, and exercised oversight over such committees
- endorsed the appointment of an audit committee member of the Bank's subsidiary in Mainland China
- approved the establishment of the audit committee of a majority-owned fund management joint venture company in Mainland China

The Audit Committee also meets annually with the representatives of the Bank's external auditor and Head of Audit without the presence of the Management in accordance with its terms of reference.

## **Risk Committee**

The Risk Committee meets at least four times a year with the Bank's executives including the Chief Executive, Chief Financial Officer, Chief Risk Officer, Head of Audit, Head of Regulatory Compliance, Head of Financial Crime Compliance, and representatives from the Bank's external auditor. The Committee is responsible for, among other things, the Bank's high level risk related matters, risk appetite and tolerance, risks associated with proposed strategic acquisitions or disposals, risk management reports from the Management, effectiveness of the enterprise risk management framework and systems of internal control and compliance (other than internal control and compliance regarding financial reporting), and appointment and removal of the Chief Risk Officer.

The Risk Committee reports to the Board following each Risk Committee meeting, drawing the Board's attention to significant issues or matters of which the Board should be aware, identifying any matters in respect of which it considers that action or improvement is needed, and making relevant recommendations.

During the year, the Risk Committee held five meetings and the major work performed by the Committee was as follows:

- reviewed the routine risk reports submitted by the Management including, but not limited to, enterprise risk management framework, internal control system assessment, global risk appetite framework addendum and risk appetite statement with profile update, results of HKMA's supervisor-driven stress tests, risk maps, top and emerging risks, annual plan and progress update relating to financial crime compliance, regulatory compliance and internal control, annual money laundering reporting officer report, and the terms of reference of RMM
- reviewed the internal capital adequacy assessment process, individual liquidity adequacy assessment, and other significant policies and plans including, but not limited to, Recovery Plan, Contingency Funding Plan, Liquidity Management Policy, Connected Lending Policy and Capital Management Policy
- reviewed the report on the alignment of risk and remuneration
- reviewed the internal control recommendations and audit issues noted by the Bank's external auditor in the annual audit
- reviewed the revised Internal Audit Charter, the enhanced Global Internal Audit Standards Manual, and internal audit reports insofar as the same give rise to any risk-related issues
- reviewed the adequacies of resources, qualifications and experience of staff of the Risk and Compliance function, and their training programmes and budgets

- reviewed the incidents reported under the Policy for the Reporting of Improprieties during the year
- reviewed the revised accounting standards and prospective changes to accounting standards, in particular, the update on IFRS9 implementation, and the impact on the Bank insofar as the same give rise to any risk-related issues
- reviewed the impact of Brexit on the Bank
- reviewed the Risk Committee's independence and effectiveness in discharging its role and responsibilities, and its terms of reference
- reviewed the establishment of Credit Risk Review Department as the dedicated second line of defence function in providing an independent and rigorous assessment of wholesale credit risk on a continuous basis
- reviewed and adopted the approach for the governance and interaction with the risk committees of the Bank's subsidiaries, and exercised oversight over such committees
- endorsed the appointment of a risk committee member of the Bank's subsidiary in Mainland China
- approved the establishment of the risk committee of a majority-owned fund management joint venture company in Mainland China

The Risk Committee also meets annually with the Bank's Head of Audit and Chief Risk Officer separately without the presence of the Management in accordance with its terms of reference.

### **Remuneration Committee**

The Remuneration Committee normally meets twice a year with the Bank's Head of Human Resources. The Committee considers and makes recommendations to the Board on the remuneration policy and structure in order to attract, motivate and retain quality personnel. Pursuant to delegation by the Board, the Committee also determines the remuneration policy, and the specific remuneration packages of all EDs, senior management and key personnel. In addition, it reviews at least annually and independently of the Management, the adequacy and effectiveness of the Bank's remuneration policy and its implementation, to ensure that the Bank's remuneration policy is consistent with relevant regulatory requirements and promotes effective risk management.

In determining the bank-wide remuneration policy, the Remuneration Committee will take into account the Bank's business objective, people strategy, short-term and long-term performance, business and economic conditions, market practices and risk management needs, in order to ensure the remuneration aligns with business and individual performance, promotes effective risk management, facilitates retention of quality personnel and is competitive in the market. The Committee may invite any Director, executive, consultant or other relevant party to provide advice in this respect, if necessary.

The Remuneration Committee reports to the Board following each Committee meeting, drawing the Board's attention to significant issues or matters of which the Board should be aware, identifying any matters in respect of which it considers that action or improvement is needed, and making relevant recommendations.

During the year, the Remuneration Committee held two meetings and the major work performed by the Committee was as follows:

- reviewed the fees payable to the Bank's Chairman, and the Directors and Board Committee chairmen/members of the Bank and its subsidiaries, and made its recommendation to the Board

- determined the remuneration packages of EDs, senior management and key personnel of the Bank, and the Vice-Chairman and Chief Executive of Hang Seng Bank (China) Limited
- reviewed the proposed variable pay for 2015 and pay review proposal for 2016, and recommended the same to the Board for approval
- reviewed the report on the alignment of risk and remuneration
- reviewed and updated the remuneration policy and the list of the Bank's material risk takers to further strengthen the governance in response to the tightened regulatory requirements
- reviewed the outcome of the review by the Internal Audit function of the remuneration policy and remuneration system, and the adequacy and effectiveness of its implementation
- reviewed the Remuneration Committee's effectiveness in discharging its role and responsibilities, and its terms of reference

### **Nomination Committee**

The Nomination Committee meets at least twice a year. It leads the process for Board appointments and identifies and nominates candidates for appointment to the Board, for the Board's approval. The Committee also considers, among other things, the structure, size and composition of the Board and Non-executive Board Committees, independence of INEDs, re-election of retiring Directors, term of appointment of NEDs, time commitment required from NEDs, and appointment to Board Committees.

The Nomination Committee reports to the Board following each Committee meeting, drawing the Board's attention to significant issues or matters of which the Board should be aware, identifying any matters in respect of which it considers that action or improvement is needed, and making relevant recommendations.

During the year, the Nomination Committee held two meetings and the major work performed by the Committee was as follows:

- reviewed the structure, size and composition of the Board and Non-executive Board Committees
- reviewed the succession planning for the Board
- reviewed the independence of INEDs
- reviewed the time commitment required from NEDs
- recommended the renewal of terms of appointment of NEDs to the Board for approval
- recommended the re-election of the retiring Directors to the Board for endorsement
- reviewed the Nomination Committee's effectiveness in discharging its role and responsibilities, and its terms of reference
- approved the revised appointment letter for NEDs

## Attendance Records

The attendance records of Board and Board Committee meetings held in 2016 are as follows:

	Meetings held in 2016						
	AGM	Board	Executive Committee	Audit Committee	Risk Committee	Remuneration Committee	Nomination Committee
Number of Meetings	1	7	12	5	5	2	2
<b>Directors</b>							
Dr Raymond K F Ch'ien* (Chairman)	1/1	7/7	-	-	-	1/2	2/2
Ms Rose W M Lee (Vice-Chairman and Chief Executive)	1/1	7/7	12/12	-	-	-	2/2
Dr John C C Chan*	1/1	7/7	-	-	-	2/2	2/2
Mr Nixon L S Chan <sup># Note 4</sup>	1/1	7/7	6/6	-	-	-	-
Mr Patrick K W Chan <sup>Note 5</sup>	1/1	5/5	12/12	-	-	-	-
Dr Henry K S Cheng*	1/1	5/7	-	-	-	-	-
Ms L Y Chiang*	0/1	7/7	-	-	-	2/2	-
Mr Andrew H C Fung	1/1	7/7	10/12	-	-	-	-
Dr Fred Zulu Hu*	0/1	6/7	-	-	5/5	-	-
Ms Irene Y L Lee*	1/1	7/7	-	5/5	5/5	-	-
Ms Sarah C Legg <sup>#</sup>	1/1	7/7	-	-	-	-	-
Dr Eric K C Li*	1/1	7/7	-	5/5	5/5	-	-
Dr Vincent H S Lo <sup>#</sup>	1/1	6/7	-	-	-	-	-
Mr Kenneth S Y Ng <sup>#</sup>	1/1	7/7	-	-	-	-	-
Mr Richard Y S Tang*	1/1	7/7	-	5/5	-	-	-
Mr Peter T S Wong <sup>#</sup>	1/1	5/7	-	-	-	-	2/2
Mr Michael W K Wu*	0/1	5/7	-	5/5	-	-	2/2
<b>Senior Management</b>							
Mrs Eunice Chan <sup>Note 6</sup>	-	-	8/10	-	-	-	-
Ms Ivy S P Chan	-	-	11/12	-	-	-	-
Ms Margaret W H Kwan <sup>Note 7</sup>	-	-	5/6	-	-	-	-
Mr Donald Y S Lam	-	-	10/12	-	-	-	-
Mr Gordon W C Lam	-	-	11/12	-	-	-	-
Mr Andrew W L Leung	-	-	11/12	-	-	-	-
Ms Elaine Y N Wang <sup>Note 7</sup>	-	-	6/6	-	-	-	-
Mr Christopher H N Ho <sup>Note 8</sup>	-	-	1/2	-	-	-	-
Mrs Louise Lam <sup>Note 9</sup>	-	-	4/6	-	-	-	-
Average Attendance Rate	82%	93%	86%	100%	100%	83%	100%

\* INEDs

# NEDs

- Note 4 Mr Nixon L S Chan, previously an ED, was re-designated as a NED with effect from 1 July 2016.
- Note 5 Mr Patrick K W Chan was appointed as an ED with effect from 19 February 2016.
- Note 6 Mrs Eunice Chan was appointed as Chief Operating Officer and an Executive Committee member with effect from 1 March 2016.
- Note 7 Ms Margaret W H Kwan and Ms Elaine Y N Wang were appointed as Head of Retail Banking and Wealth Management and Head of Human Resources respectively on 1 July 2016. Ms Kwan and Ms Wang were also appointed as Executive Committee members on the same day.
- Note 8 Mr Christopher H N Ho resigned as Chief Operating Officer and an Executive Committee member with effect from 29 February 2016.
- Note 9 Mrs Louise Lam resigned as Head of Human Resources and an Executive Committee member with effect from 1 July 2016.

## REMUNERATION OF DIRECTORS, SENIOR MANAGEMENT AND KEY PERSONNEL

The Bank's policy on remuneration is to maintain fair and competitive packages based on business needs and industry practice.

### Remuneration of Directors

The level of fees paid to NEDs is determined by reference to factors including Directors' workload and commitment, and fees paid by comparable institutions.

As regards EDs, the following factors are considered when determining their remuneration packages:

- business objective
- general business and economic conditions
- changes in appropriate markets such as supply/demand fluctuations and changes in competitive conditions
- individual contributions to results as confirmed in the performance appraisal process
- retention consideration and individual potential

No individual Director will be involved in decisions relating to his/her own remuneration.

The current scale of Director's fees, and fees for chairmen and members of the Non-executive Board Committees, namely, Audit Committee, Risk Committee, Remuneration Committee and Nomination Committee, are set out below:

	(HK\$ '000)		(HK\$ '000)
<u>Board of Directors</u> <sup>Note 10</sup>		<u>Risk Committee</u>	
Chairman	590	Chairman	260
Non-executive Directors	450	Members	160
<u>Audit Committee</u>		<u>Remuneration Committee/ Nomination Committee</u>	
Chairman	260	Chairman	90
Members	160	Members	60
Members of both Audit Committee and Risk Committee	280		

Note 10 In line with the remuneration policy of HSBC Group, no Director's fee is payable to those Directors who are full time employees of the Bank and its subsidiaries.

Information relating to the remuneration of Directors on a named basis for the year ended 31 December 2016 is set out in Note 16 to the Bank's 2016 Financial Statements.

## Remuneration of Senior Management and Key Personnel

According to HKMA’s SPM CG-5 “Guideline on a Sound Remuneration System”, authorised institutions are required to make disclosures in relation to their remuneration systems as appropriate. The Bank has fully complied with HKMA’s disclosure requirements set out in Part 3 of the said Guideline.

There were thirteen and six employees being classified as Senior Management <sup>Note 11</sup> and Key Personnel <sup>Note 12</sup> respectively during the year. Therefore, the aggregate amount of remuneration <sup>Note 13</sup> of the Senior Management and Key Personnel during the year, split into fixed and variable remuneration, is set out below:

Amount (HK\$ '000)	2016 <sup>Note 14</sup> (19 employees)		2015 <sup>Note 14</sup> (15 employees)	
	Non-deferred	Deferred	Non-deferred	Deferred
Fixed remuneration				
Cash	53,152	-	39,683	-
Shares	-	-	3,982	-
Variable remuneration				
Cash	19,319	6,429	17,789	6,119
Shares	7,063	9,928	6,624	9,812

<sup>Note 11</sup> Senior Management refers to those executives who are:  
(a) EDs; (b) senior executives of the Bank at the rank of Band 1, and if not already covered by the aforesaid; (c) Heads of the Bank’s major business lines, namely, Global Banking and Markets, Retail Banking and Wealth Management, and Commercial Banking; (d) Chief Financial Officer; (e) Chief Operating Officer; (f) Chief Risk Officer; (g) Head of Human Resources; and (h) Head(s) of the Bank’s principal subsidiary/subsidiaries with offshore operations and with total assets representing more than 5% of the Bank’s total assets.

<sup>Note 12</sup> Key Personnel refers to (a) those executives other than Senior Management, at the rank of Band 3 or above, who are engaged in trading and dealing activities which involve the assumption of material risk or the taking on of material exposures on behalf of the Bank and its subsidiaries, and (b) employees classified as “Identified Staff and Material Risk Takers” under the UK Prudential Regulation Authority Remuneration Code.

<sup>Note 13</sup> Remuneration refers to all remuneration payable to employees during the year with reference to their tenure as Senior Management and Key Personnel. The forms of variable remuneration and the proportion deferred are based on the seniority, role and responsibilities of employees and their level of total variable compensation. As the total number of Senior Management and Key Personnel involved is relatively small, to avoid individual figures being deduced from the disclosure, aggregate figures are disclosed in this section.

<sup>Note 14</sup> No deferred variable remuneration had been reduced through performance adjustments in 2016 and 2015. No Senior Management or Key Personnel has been awarded or paid guaranteed bonus, new sign-on or severance payment during the years of 2016 and 2015.

Aggregate amount of deferred variable remuneration, split into (a) vested and paid during the year and (b) outstanding and unvested at the end of the year, is set out below:

Amount (HK\$ '000)	2016		2015	
	Awarded for Performance Year 2016	Awarded for Prior Performance Years	Awarded for Performance Year 2015	Awarded for Prior Performance Years
<b>Vested and paid out during the year</b> <sup>Note 16</sup>				
Cash	-	2,864	-	1,095
Shares	-	7,043	-	6,015
<b>Outstanding and unvested at the end of the year</b> <sup>Notes 15 &amp; 17</sup>				
Cash	6,429	10,464	6,119	7,001
Shares <sup>Note 18</sup>	9,928	29,258	9,812	17,591

<sup>Note 15</sup> Outstanding, unvested, deferred remuneration is exposed to ex post explicit adjustments via malus.

<sup>Note 16</sup> Paid and vested variable pay made to Material Risk Takers is subject to clawback.

<sup>Note 17</sup> There is no reduction of deferred remuneration and retained remuneration exposed due to ex post explicit adjustments during 2016 and 2015 via the application of malus and/or clawback.

<sup>Note 18</sup> Outstanding, unvested, deferred shares are exposed to ex post implicit adjustments. The total value of these shares in 2016 and 2015 are calculated based on the closing market share price of HSBC Holding plc (London) as at 31 December of the respective financial years. HSBC's share price is 22% higher as at 31 December 2016 when compared to that of 31 December 2015.

Other relevant remuneration disclosures are set out in Notes 15, 16 and 56(b) to the Bank's 2016 Financial Statements.

## ACCOUNTABILITY AND AUDIT

### Financial Reporting

The Board aims at making a balanced, clear and comprehensive assessment of the Bank's performance, position and prospects. An annual operating plan is reviewed and approved by the Board on an annual basis. Reports on financial results, business performance and variances against the approved annual operating plan are made available to the Board for review and monitoring on a monthly basis.

Strategic planning cycles are generally from three to five years. The Bank's strategic plan for 2016-2018 was reviewed and approved by the Board in April 2016. Progress of the implementation of the key initiatives in the strategic plan is reported to and reviewed by the Board and Executive Committee on a quarterly basis.

The annual and interim results of the Bank are announced in a timely manner within three months and two months respectively after the end of the relevant year or period.

The Directors acknowledge their responsibilities for preparing the accounts of the Bank. As at 31 December 2016, the Directors were not aware of any material uncertainties relating to events or conditions which may cast significant doubt upon the Bank's ability to continue as a going concern.

Accordingly, the Bank's Directors have prepared the financial statements of the Bank on a going-concern basis.

The responsibilities of the external auditor with respect to financial reporting are set out in the Independent Auditor's Report attached to the Bank's 2016 Financial Statements.

## **Internal Controls**

### **System and Procedures**

The Board is responsible for internal control of the Bank and its subsidiaries and for reviewing its effectiveness.

The Bank's internal control system comprises a well-established organisational structure and comprehensive policies and standards. Areas of responsibilities for each business and functional unit are clearly defined to ensure effective checks and balances.

Procedures have been designed for safeguarding assets against unauthorised use or disposition; for maintaining proper accounting records; and for ensuring the reliability of financial information used within the business or for publication. The procedures provide reasonable but not absolute assurance against material errors, losses or fraud. Procedures have also been designed to ensure compliance with applicable laws, rules and regulations.

Systems and procedures are in place in the Bank to identify, control and report on the major types of risks the Bank encounters. Business and functional units are responsible for the assessment of individual types of risk arising under their areas of responsibilities, the management of the risks in accordance with risk management procedures and the reporting on risk management. The Bank maintains an effective risk management framework through the setting up of specialised management committees for the oversight and monitoring of major risk areas and the establishment of risk management departments under the relevant control functions of the Bank. Relevant risk management reports are submitted to Asset and Liability Management Committee, RMM, Executive Committee and Risk Committee, and ultimately to the Board for oversight and monitoring of the respective types of risk. The Bank's risk management policies and major control limits are approved by the Board or its delegated committees, and are monitored and reviewed regularly according to established policies and procedures.

More detailed discussion on the policies and procedures for management of each of the major types of risk the Bank encounters is set out in the "Risk Management" and "Capital Management" sections of the "Management Discussion and Analysis" in this Annual Report, and Supplementary Notes to the Bank's 2016 Financial Statements.

### **Annual Assessment**

A review of the effectiveness of the Bank's internal control system covering all material controls, including financial, operational, compliance, and risk management controls, is conducted annually. The review at the end of 2016 was conducted with reference to the COSO (The Committee of Sponsoring Organisations of the Treadway Commission) internal control framework, which assesses the Bank's internal control system against the five elements of control environment, risk assessment, control activities, information and communication, and monitoring. The review results have been reported to the Audit Committee, Risk Committee and the Board. The Board is satisfied that such system is effective and adequate. In addition, the Bank, through the Audit Committee, has also reviewed the adequacy of resources, qualifications and experience of staff of the Accounting and Financial Reporting functions, and their training programmes and budget.



## Framework for Disclosure of Inside Information

The Bank has put in place a robust framework for the disclosure of inside information in compliance with the Securities and Futures Ordinance. The framework sets out the procedures and internal controls for the handling and dissemination of inside information in a timely manner so as to allow all the stakeholders to apprehend the latest position of the Bank and its subsidiaries. The framework and its effectiveness are subject to review on a regular basis according to established procedures.

## Internal Audit

The primary role of the Internal Audit function is to help the Board and the Management to protect the assets, reputation and sustainability of the Bank. The Internal Audit function provides independent and objective assurance as to whether the design and operational effectiveness of the Bank's framework of risk management, control and governance processes, as designed and represented by the Management, is adequate.

The Bank has adopted a risk management and internal control structure, referred to as the "Three Lines of Defence", to ensure it achieves its commercial aims while meeting regulatory and legal requirements, and its responsibilities to shareholders, customers and staff. The Internal Audit function's role as the third line of defence is independent of the first and second lines of defence. The Bank's Head of Audit reports to the Chairman and the Audit Committee.

Results of audit work together with an assessment of the overall risk management and control framework are reported to the Audit Committee and the Risk Committee as appropriate. The Internal Audit function also reviews the Management's action plans in relation to audit findings and verifies the adequacy and effectiveness of the mitigating controls before formally closing the issue.

## External Auditor

PricewaterhouseCoopers is the Bank's external auditor. The Audit Committee is responsible for making recommendations to the Board on the appointment, re-appointment, removal and remuneration of the external auditor. The external auditor's independence and objectivity, and the effectiveness of the audit process are also reviewed and monitored by the Audit Committee on a regular basis.

During 2016, fees paid to the Bank's external auditor for audit services amounted to HK\$13.4 million, compared with HK\$12.6 million in 2015. For non-audit services, the fees paid to the Bank's external auditor amounted to HK\$9.1 million, compared with HK\$7.2 million in 2015. In 2016, the significant non-audit service assignments covered by these fees included the following:

Nature of service	Fees paid (HK\$ million)
Other assurance services	8.3
Tax services	0.8
	<hr/> 9.1

## Audit Committee

The Audit Committee assists the Board in meeting its responsibilities for ensuring effective systems of internal control and compliance relating to financial reporting, and in meeting its financial reporting obligations.

## Risk Committee

The Risk Committee assists the Board in meeting its responsibilities for ensuring effective systems of risk management, internal control and compliance (other than that relating to financial reporting), and in meeting its risk governance obligations.

## COMMUNICATION WITH SHAREHOLDERS

### Effective Communication

The Bank attaches great importance to communication with shareholders. To this end, a number of means are used to promote greater understanding and dialogue with the investment community. The Bank holds group meetings with analysts in connection with the Bank's annual and interim results. The results announcements are also broadcast live via webcast. Apart from the above, designated senior executives maintain regular dialogue with institutional investors and analysts to keep them abreast of the Bank's development, subject to compliance with the applicable laws and regulations. Including the two results announcements, around a hundred meetings with analysts and fund managers were held in 2016. In addition, the Bank's Vice-Chairman and Chief Executive, and Chief Financial Officer also made presentations and held group meetings with investors at investor forums.

Further, the Bank's website ([www.hangseng.com](http://www.hangseng.com)) offers timely access to the Bank's financial information, announcements, circulars to shareholders and information on the Bank's corporate governance structure and practices. For efficient communication with shareholders and in the interest of environmental preservation, shareholders are encouraged to browse the Bank's corporate communications on the Bank's website, in the place of receiving printed copies of the same.

The AGM provides a useful forum for shareholders to exchange views with the Board. The Bank's Chairman, EDs, Chairmen of the Board Committees and NEDs are available at the AGM to answer questions from shareholders about the business and performance of the Bank. In addition, the Bank's external auditor is also invited to attend the AGM to answer questions about the conduct of the audit, and the preparation and contents of the auditor's report. Separate resolutions are proposed at general meetings for each substantial issue, including the re-election and election (as the case may be) of individual Directors. An explanation of the detailed procedures of conducting a poll will be provided to shareholders at the AGM, to ensure that shareholders are familiar with such procedures.

The Bank's last AGM was held on Friday, 6 May 2016 at Hang Seng Bank Headquarters, 83 Des Voeux Road Central, Hong Kong. All the resolutions proposed at that meeting were approved by the shareholders by poll voting. Details of the poll results are available under the "Investor Relations" section of the Bank's website ([www.hangseng.com](http://www.hangseng.com)).

The next AGM will be held on Friday, 12 May 2017, the notice of which will be sent to shareholders at least 20 clear business days before the said meeting. Shareholders may refer to the section "Corporate Information and Calendar" in this Annual Report for information on other important dates for shareholders in year 2017.

### Calling an Extraordinary General Meeting

Shareholder(s) holding not less than five percent of the total voting rights of all the members having a right to vote may request to call an Extraordinary General Meeting of the Bank.

The requisition (a) must state the general nature of the business to be dealt with at the meeting, (b) must be signed by the requisitioner(s), and (c) may either be deposited at the Bank's registered office at 83 Des Voeux Road Central, Hong Kong in hard copy form or sent by email to [egmrequisition@hangseng.com](mailto:egmrequisition@hangseng.com). If the resolution is to be proposed as a special resolution, the requisition should include the text of the resolution and specify the intention to propose the resolution as a special resolution. The requisition may consist of several documents in like form, each signed by one or more requisitioner(s).

The requisition must also state (a) the name(s) of the requisitioner(s), (b) the contact details of the requisitioner(s), and (c) the number of ordinary shares of the Bank held by the requisitioner(s).

The Directors must proceed to convene an Extraordinary General Meeting within 21 days from the date of receipt of the requisition. Such meeting should be held on a date not more than 28 days after the date on which the notice convening the meeting is given.

If the Directors fail to convene the Extraordinary General Meeting as aforesaid, the requisitionist(s), or any of them representing more than one-half of the total voting rights of all of them, may themselves convene the meeting. Any meeting so convened shall not be held after the expiration of three months from the date of the deposit of the requisition.

A meeting so convened by the requisitionist(s) shall be convened in the same manner, as nearly as possible, as that in which meetings are to be convened by the Directors.

Any reasonable expenses incurred by the requisitionist(s) by reason of the failure of the Directors to convene a meeting shall be reimbursed to the requisitionist(s) by the Bank.

### **Putting Forward Proposals at General Meetings**

Shareholders representing at least 2.5 percent of the total voting rights of all the members having a right to vote, or, at least 50 shareholders who have a relevant right to vote, may:

- put forward proposal at general meeting
- circulate to other shareholders written statement with respect to matter to be dealt with or other business to be dealt with at general meeting

For further details on shareholder qualifications, and the procedures and timeline, in connection with the above, shareholders are kindly requested to refer to Sections 580 and 615 of the Companies Ordinance (Cap 622, Laws of Hong Kong).

Further, a shareholder may propose a person other than a retiring Director of the Bank for election as a Director of the Bank at a general meeting. For such purpose, the shareholder must send to the Bank's registered address (for the attention of the Bank's Company Secretary) a written notice which identifies the candidate and includes a notice in writing by that candidate of his/her willingness to be so elected. Such notice must be sent within the seven-day period commencing on the day after the despatch of the notice of the meeting, or such other period as may be determined by the Directors from time to time, and ending no later than seven days prior to the date appointed for such meeting. Procedures for shareholders to propose candidates for election as Director of the Bank are also available on the website of the Bank ([www.hangseng.com](http://www.hangseng.com)).

### **Putting Enquiries to the Board**

Shareholders may send their enquiries requiring the Board's attention to the Bank's Company Secretary at the Bank's registered address. Questions about the procedures for convening or putting forward proposals at an AGM or Extraordinary General Meeting may also be put to the Company Secretary by the same means.

### **Shareholders Communication Policy**

The Bank has established a Shareholders Communication Policy to set out the Bank's processes to provide shareholders and the investment community with ready, equal and timely information on the Bank for them to make informed assessments of the Bank's strategy, operations and financial performance, and to engage actively with the Bank. The said policy is available on the Bank's website ([www.hangseng.com](http://www.hangseng.com)).

## MATERIAL RELATED PARTY TRANSACTIONS

### Material Related Party Transactions and Contracts of Significance

The Bank's material related party transactions are set out in Note 56 to the 2016 Financial Statements. These transactions include those that the Bank has entered into with its immediate holding company and fellow subsidiary companies in the ordinary course of its interbank activities, including the acceptance and placement of interbank deposits, corresponding banking transactions, off-balance sheet transactions, and the provision of other banking and financial services.

The Bank uses the information technology services of, and shares an automated teller machine network with, The Hongkong and Shanghai Banking Corporation Limited, its immediate holding company. The Bank also shares information technology and certain processing services with fellow subsidiaries on a cost recovery basis. In 2016, the Bank's share of the costs included HK\$339 million for system development, HK\$440 million for data processing, and HK\$275 million for administrative services.

The Bank maintains a staff retirement benefit scheme for which a fellow subsidiary company acts as insurer and administrator. As part of its ordinary course of business with other financial institutions, the Bank also markets Mandatory Provident Fund and life insurance products and distributes retail investment funds for fellow subsidiaries, with a fee income of HK\$140 million and HK\$59 million respectively in 2016. Hang Seng Investment Management Limited, a wholly owned subsidiary of the Bank, manages, in the ordinary course of its business, a fund administered by a fellow subsidiary, to which management fee rebates were made. The rebate for 2016 amounted to HK\$112 million.

These transactions were entered into by the Bank in the ordinary and usual course of business on normal commercial terms, and in relation to those which constituted connected transactions under the Listing Rules, they also complied with applicable requirements under the Listing Rules. The Bank regards its usage of the information technology services of The Hongkong and Shanghai Banking Corporation Limited (amount of information technology services cost incurred for 2016: HK\$330 million) as contracts of significance for 2016.

### Continuing Connected Transactions

- (a) On 21 June 2013, Hang Seng Insurance Company Limited ("HSIC"), a wholly-owned subsidiary of the Bank, entered into the following agreements, both of which expired on 21 June 2016:
- (i) A management services agreement ("Previous Management Services Agreement") with HSBC Life (International) Limited ("INHK") for a term of three years, pursuant to which INHK, directly or through one or more of its affiliates, provided certain management services to HSIC.  
  
INHK charged HSIC for the provision of the services on a fully absorbed cost basis plus a mark-up of 5%. These charges were determined following negotiation on an arm's length basis and in accordance with the policy of the HSBC Group, which took into account the transfer pricing guidelines of UK and the Organisation for Economic Co-operation and Development ("OECD").
  - (ii) An investment management agreement ("Previous Investment Management Agreement") with HSBC Global Asset Management (Hong Kong) Limited ("AMHK") for a term of three years, pursuant to which AMHK acted as investment manager in respect of certain of HSIC's assets held from time to time. AMHK has delegated to HSBC Alternative Investments Limited ("HAIL") the management of part of such assets by way of a bespoke portfolio.

HSIC paid to AMHK, on a quarterly basis, a fee of between 0.15% and 0.75% per annum before 1 January 2014, and between 0.05% and 0.35% per annum with effect from 1 January 2014, of the mean value of the assets under management. HSIC also paid to HAIL a fee of between 0.5% and 0.9% per annum before 1 November 2014, and 0.5% per annum with

effect from 1 November 2014, of the aggregate value of assets under management in a bespoke portfolio. On top of the aforesaid, HSIC also paid to HAIL a performance fee of 10% per annum in respect of the amount by which the return of such portfolio exceeded a benchmark return of 3.5% above 3-month LIBOR per annum before 1 November 2014, and 8% per annum with effect from 1 November 2014. The above fees were determined on an arm's length basis. Subject to the caps under the Previous Investment Management Agreement not being exceeded, HSIC and AMHK may subsequently agree to vary the above fees.

Details of the terms of, and the annual caps under, the Previous Management Services Agreement and the Previous Investment Management Agreement were announced by the Bank on 21 June 2013.

(b) On 21 June 2016, HSIC entered into the following new agreements:

- (i) A new management services agreement ("New Management Services Agreement") with INHK for a term of three years, pursuant to which INHK, directly or through one or more of its affiliates, provides certain management services to HSIC.

INHK charged HSIC for the provision of the services on a fully absorbed cost basis plus a mark-up of 10% for actuarial and risk analytics services and 6% for all other services. These charges were determined following negotiation on an arm's length basis and in accordance with the policy of the HSBC Group, which took into account OECD transfer pricing guidelines.

- (ii) A new investment management agreement ("New Investment Management Agreement") with AMHK for a term of three years, pursuant to which AMHK acts as investment manager in respect of certain of HSIC's assets held from time to time. AMHK has delegated to HAIL the management of part of such assets by way of a bespoke portfolio.

HSIC paid to AMHK, on a quarterly basis, a fee of between 0.05% and 0.35% per annum of the mean value of the assets under management. HSIC also paid to HAIL a fee of 0.5% per annum of the aggregate value of assets under management in a bespoke portfolio together with a performance fee of 10% per annum in respect of the amount by which the return of such portfolio exceeded a benchmark return of 8% per annum. The above fees were determined on an arm's length basis. Subject to the caps under the New Investment Management Agreement not being exceeded, HSIC and AMHK may subsequently agree to vary the above fees.

- (iii) A private equity investment management agreement ("PE Investment Management Agreement") with HAIL for a term of 11 years, pursuant to which HAIL acts as investment manager in respect of certain private equity fund investments made by HAIL on behalf of HSIC.

HSIC paid HAIL a fee of between 0.1% and 0.75% per annum of the aggregate value of assets under management as an annual retainer fee and an annual management fee on an aggregate basis. On top of the aforesaid, a performance fee of 15% carried interest will be paid if certain hurdle rates of return are achieved for HSIC in respect of the investments made in each year of the investment period under the PE Investment Management Agreement. The above fees have been determined on an arm's length basis.

Pursuant to the Listing Rules, the term of an agreement for a continuing connected transaction of a listed company must not exceed three years except in special circumstances. As the term of the PE Investment Management Agreement is 11 years, the Bank, in compliance with the Listing Rules requirement, appointed an independent financial adviser to explain why the PE Investment Management Agreement requires a term that is longer than three years and to confirm that it is normal business practice for investment management

agreements relating to private equity investments to be of such duration. The explanation and confirmation by the independent financial adviser were set out in the Bank's announcement of 21 June 2016.

The Bank considered that due to the similarity of the services provided under the New Investment Management Agreement, the PE Investment Management Agreement, and the fund monitoring agreement entered into between HSIC and HAIL on 12 December 2013 ("Previous Fund Monitoring Agreement"), the fees payable by HSIC under these three agreements should be aggregated for the purpose of the Listing Rules. The Previous Fund Monitoring Agreement, on a standalone basis, was a "de minimis" continuing connected transaction which was fully exempt from any reporting, announcement, shareholders' approval and annual review requirements under the Listing Rules.

Details of the terms of the New Management Services Agreement, the New Investment Management Agreement, the PE Investment Management Agreement and the Previous Fund Monitoring Agreement, and the relevant annual caps and fee caps were announced by the Bank on 21 June 2016.

- (c) Upon expiry of the Previous Fund Monitoring Agreement, a new fund monitoring agreement ("New Fund Monitoring Agreement") was entered into between HSIC and HAIL on 12 December 2016 for a term of three years, pursuant to which HAIL provides fund monitoring and reporting services for certain private equity investments made by HSIC. HSIC has agreed to pay HAIL a fee of 0.04% per annum on the aggregate USD commitments in such investments, which is the same as the Previous Fund Monitoring Agreement, subject to an annual cap of US\$75,000 (approximately HK\$585,000). The above fee was determined on an arm's length basis.

The New Fund Monitoring Agreement, on a standalone basis, is a "de minimis" continuing connected transaction which is fully exempt from any reporting, announcement, shareholders' approval and annual review requirements under the Listing Rules. However, the Bank considers that the fee payable by HSIC under the New Fund Monitoring Agreement should be aggregated with the New Investment Management Agreement and the PE Investment Management Agreement for the purpose of the Listing Rules, and it is therefore subject to the annual review requirements under the Listing Rules together with those agreements.

INHK, AMHK and HAIL are all indirect wholly-owned subsidiaries of HSBC Group, the ultimate controlling shareholder of the Bank, and therefore are connected persons of the Bank. Accordingly, all the aforesaid agreements constituted continuing connected transactions of the Bank. The Bank has complied with the disclosure requirements in accordance with Chapter 14A of the Listing Rules.

For the year ended 31 December 2016, the aggregate amount paid under the Previous Management Services Agreement and the New Management Services Agreement was HK\$76 million, whereas the aggregate amount paid under the Previous Investment Management Agreement and the New Investment Management Agreement was HK\$42 million, both of which were within the annual caps for the year ended 31 December 2016 of HK\$240 million and HK\$146 million, respectively. The retainer fee of approximately US\$91,111 (equivalent to HK\$706,598), the management fee of approximately US\$100,000 (equivalent to HK\$775,535) and no performance fee were payable under the PE Investment Management Agreement for the year ended 31 December 2016. Such fees were within the annual cap on retainer fee of US\$300,000 (approximately HK\$2,325,000), the annual cap on management fee of US\$2,000,000 (approximately HK\$15,500,000) and the cap on performance fee of US\$75,000,000 (approximately HK\$581,250,000) respectively. Further, for the year ended 31 December 2016, the aggregate amount paid under the Previous Fund Monitoring Agreement and the New Fund Monitoring Agreement was approximately US\$56,877 (equivalent to HK\$441,100), which was within the annual cap of US\$75,000 (approximately HK\$585,000).

In respect of all the aforesaid agreements which constituted the Bank's continuing connected transactions, all the INEDs of the Bank have reviewed the said transactions and confirmed that the said transactions have been entered into:

- (a) in the ordinary and usual course of business of the Bank and its subsidiaries;
- (b) on normal commercial terms or better; and
- (c) in accordance with the relevant agreements governing the same on terms that are fair and reasonable and in the interests of the shareholders of the Bank as a whole.

Further, the Bank engaged its external auditor to report on the continuing connected transactions of the Bank and its subsidiaries in accordance with Hong Kong Standard on Assurance Engagements 3000 (Revised) “Assurance Engagements Other Than Audits or Reviews of Historical Financial Information” and with reference to Practice Note 740 “Auditor’s Letter on Continuing Connected Transactions under the Hong Kong Listing Rules” issued by the Hong Kong Institute of Certified Public Accountants. The Directors confirmed that the external auditor had issued an unqualified letter containing their findings and conclusions in respect of the continuing connected transactions set out in the preceding paragraphs in accordance with Rule 14A.56 of the Listing Rules. A copy of the auditor’s letter has been provided by the Bank to The Stock Exchange of Hong Kong Limited.

## **HUMAN RESOURCES**

The human resources policies of the Bank are designed to attract people of the highest calibre and to motivate them to excel in their careers, as well as uphold the Bank’s brand equity and culture of quality service.

### **Employee Statistics**

As at 31 December 2016, the Bank’s total headcount was 9,673 representing a decrease of 468, or -4.6%, compared with a year earlier. The total headcount comprised 2,175 executives, 4,328 officers and 3,170 clerical and non-clerical staff.

### **Employee Remuneration**

The quality and engagement of employees are fundamental to the Bank’s success and the Bank aims to attract, motivate and retain the best people. The Bank’s reward strategy supports this objective through rewarding those who are committed to maintaining a long-term career with the Bank with good sustainable performance.

The Remuneration Committee oversees the Bank’s overall remuneration strategy and ensures all the reward policies are carefully considered in the context of business objective, people strategy, commercial competitiveness, alignment of risk and reward and regulatory guidance. The fundamental principles, philosophies and processes are documented in the Bank’s remuneration policy.

The Bank adopts a Total Compensation Approach. In determining the total remuneration for employees, fixed and discretionary variable pay are looked at together and differentiated by performance and adherence to Group values. The Bank will make reference to individual’s responsibility, capability and risk profile of the job to ensure an appropriate balance between the fixed pay and variable pay.

Fixed pay is determined by taking into account relevant level and composition of pay in the markets in which the Bank operates. Salaries are reviewed in the context of business performance, individual potential and performance, market practice, internal relativities and regulatory requirements.

Bank-wide variable pay budgets are determined in consideration of the Bank’s business performance, people strategy, risk appetite statement and risk metrics including conduct risks. This helps to ensure that the variable pay pool is shaped by risk considerations and the Bank’s performance is sustainable in the long-term. The ex-ante risk adjustment of remuneration within the Bank is achieved in the way that the Risk Committee of the Bank will advise the Board and/or the Remuneration Committee, as appropriate, on the alignment of risk appetite with performance objectives set in the context of variable incentive and on whether any adjustments for risk need to be applied when considering performance objectives and actual performance. In addition, the overall variable pay funding proposal is refined with

reference to the advice of Chief Financial Officer and Chief Risk Officer in respect of the Bank's financial position and performance against its risk appetite profile.

Variable pay plans takes into account a combination of corporate and/or business results as well as the individual's performance. They reward financial quantitative measures and non-financial qualitative measures including compliance to Group values, management of risks, service standards, ethical behaviour and responsible selling. To embed a values-led, high performance culture, the variable pay plans are designed to recognise and reward positive behaviours while discourage negative behaviours that put the Bank under unnecessary financial, regulatory or reputational risk via the application of consequence management, malus and clawback policies.

Variable pay consists of deferred and non-deferred components in the forms of cash and share award. The Bank adopts a progressive deferral mechanism with higher deferral rates and different forms of deferral by reference to (a) the employee's seniority, role, responsibilities and the potential risks that their activities may create for the Bank; and (b) the total amount of variable remuneration exceeding the prescribed thresholds. The deferred award has a vesting period of three to seven years and is subject to malus and clawback.

The principles of the remuneration policy are applicable to the Bank and its subsidiaries, subject to the local legislative requirements and market practices, and are proportionate to the scope and complexity of the local business.

## **Employee Engagement**

The Bank aims to create a work environment that promotes employee engagement, champions diversity and an inclusive culture, values and empowers our employees to perform at their best, and supports their career development.

An annual Bank-wide employee survey was conducted in June 2016 and subsequent surveys have been carried out on a regular basis to continue to gather employee insights in a timely way. The results of the surveys indicate that our employees' confidence about the Bank's strategy and trust between employees and senior leadership is very strong. Employees are positive about the "speak-up" culture and working conditions at the Bank, and many employees are proud to say that they work at the Bank.

## **Growth and Development**

The Bank is committed to ensuring the competence and ethical behaviour of staff members with due regard to the principles set out in HKMA's SPM CG-6 on "Competence and Ethical Behaviour". The Bank has established policies and procedures for monitoring, developing and maintaining the competence level and ethical behaviour of staff members. These include clear guidance as set out in various policy manuals, robust performance management system, and training and development solutions provided on a regular and need basis.

In order to fully develop staff competence and potential and to help them quickly integrate into the Bank, new joiners are provided with a comprehensive induction programme that enhances their understanding of the Bank's history, vision, culture, values, risk management and corporate governance. To equip staff members with necessary skills and knowledge to meet future challenges and professional requirements, especially those who are involved in regulated businesses and activities, the Bank offers a wide range of training and development programmes in the areas of sales and relationship management, products, operations, compliance, credit and risk. Apart from these programmes, the Bank has launched an Anti-Money Laundering and Sanctions training programme for staff in roles deemed to be of "High Risk" to provide them with an in-depth knowledge in detecting, deterring and protecting against financial crime risks. The Bank also offers Professional Qualifications and Education Award Scheme to support staff members to pursue professional or academic qualifications. On average, the Bank's staff members received six days of training in 2016.



The Bank aims to strengthen the leadership pipeline and support the personal growth of staff by providing a broad range of leadership and management development solutions. To ensure sustainability, the Bank has strategies, measures and analytics in accordance with Group's guidance to plan and manage succession to key roles, and to facilitate high-potentials feed to the succession pipeline. Businesses/functions and the Human Resources function are connected to accelerate the development of successors and high potential staff through a mix of on-the-job training, coaching and learning initiatives.

In support of the Bank's vision, strategy and values, apart from the existing leadership programmes, a global cultural change training series have been put in place since 2015. Around 6,600 employees and 700 people managers have completed the programme since its launch. To reinforce the key messages from the programmes, stories from employees on how the values are embedded in their day to day work are shared and published through various channels, including the mass broadcast for employees and staff intranet. Initiatives including manager-led team discussions are held to drive and support a speak-up and make-better-decision culture at the workplace.

## **Recruitment and Retention**

Vigorous recruitment activities continued throughout 2016 to support the Bank's strategic business development and to replace out-going staff, especially front line sales positions, experienced professionals and specialists.

Young talents are constantly recruited and groomed through well-structured and intensive development programmes. Further, trainee programmes have been provided for jobs in selected functional areas in order to build pipeline for succession. There were also conscious efforts on retention of talents and key staff through review of career advancement opportunities and remuneration package to ensure market competitiveness.

## **OTHER INFORMATION**

### **Organisational Structure**

Under the Bank's current organisational structure, the Bank's businesses and functions are set out as follows:

#### *Businesses*

Retail Banking and Wealth Management  
Commercial Banking  
Global Banking and Markets

#### *Functions*

Audit  
Communications  
Company Secretarial Services  
Corporate Sustainability  
Financial Crime Compliance  
Financial Control  
Human Resources  
Legal  
Marketing  
Risk and Compliance  
Strategic Planning and Corporate Development  
Operations, Services and Technology

## **Business Principles and Values**

The Bank has a set of well-founded business principles and corporate values guiding staff to keep the highest standards of integrity as well as to comply with the spirit and letter of all laws and regulations when conducting business. “Courageous Integrity” is the guiding principle whereby staff are courageous to do the right thing without compromising the ethical standards and integrity, and behave in a “Dependable, Open and Connected” way in everyday work. The Bank advocates the living of values by all staff, promotes their awareness and commitment, and empowers leaders and managers to drive values-aligned behaviour in the workplace.

## **Staff Code of Conduct**

To ensure the Bank operates according to the highest standards of ethical conduct and professional competence, all staff are required to strictly follow the Staff Code of Conduct contained in the Bank’s Staff Handbook. With reference to applicable regulatory guidelines and other industry best practices, the Code sets out ethical standards and values to which all the Bank’s staff are required to adhere and covers various legal, regulatory and ethical issues. Topics including, but not limited to, the prevention of bribery, use of information, insider dealing and personal dealings, personal benefits, outside directorships/employment, and equal opportunities policy, are covered in the Code.

The Bank uses various communication channels to periodically remind staff of the requirement to adhere to the rules and ethical standards set out in the Staff Code of Conduct.

## **Avoidance of Conflicts of Interest**

The Bank has set standards and established policies and procedures to manage actual or potential conflicts of interest of its staff. Robust organisational structure has been designed to ensure adequate segregation of duties and avoid conflicts of interest. Staff working in sensitive or high-risk areas are required to adhere to job-specific rules and undergo training regarding avoidance of conflicts of interest in carrying out their duties.

## **Health and Safety**

The Bank has a demonstrated commitment to occupational health and safety (“OH&S”) in the workplace with employee engagement through committees, forums and working groups in the development of an OH&S Policy and Management System. By successfully implementing the certified BS OHSAS 18001:2007-compliant Safety Management System, the Bank marks its achievement to be the first bank world-wide to conform to this internationally acclaimed best practice aiming at reducing the exposure of the Bank’s staff, contractors and customers to OH&S risks associated with its business activities at premises over which it has control.

The Bank provides a range of training and activities to enhance the knowledge of its staff in OH&S, fire safety, manual operation, and office safety. A number of staff have acquired Qualified First Aider status so as to offer prompt assistance to their colleagues and customers in the event of a medical emergency or accident whilst awaiting the arrival of the ambulance. Some Qualified First Aiders have also been trained to operate the Automated External Defibrillators installed in the Bank premises.

The Bank implements a Contingency Plan for Communicable Disease, which sets out the key issues to be addressed and the actions to be taken by various units in response to the occurrence of a serious communicable disease, and the keeping of adequate stock of face masks to cater for the needs of its staff in response to an outbreak of influenza pandemic. Staff have been made aware through the Bank-wide intranet of the importance of personal hygiene and health, and the contingency measures to be adopted, to enable the Bank to continue with its services to the community during an outbreak of a serious communicable disease.

The Bank operates a Staff Recreation Centre in Kowloon with a variety of facilities for health enhancement and leisure activities to foster work life balance among its staff and their family members.

# BIOGRAPHICAL DETAILS OF DIRECTORS AND SENIOR MANAGEMENT

## Board of Directors

**Dr Raymond CH'IEN Kuo Fung** GBS, CBE, JP  
Independent Non-executive Chairman

*Aged 65*

*Joined the Board* since August 2007

*Other positions held within Hang Seng Group*

- ^ **Hang Seng Bank Limited** –  
Chairman of Nomination Committee; Member of Remuneration Committee

*Other major appointments*

**Justice of the Peace**

- ^ **China Resources Power Holdings Company Limited** – Independent Non-executive Director
- Economic Development Commission of HKSAR Government** – Non-official Member
- Federation of Hong Kong Industries** – Honorary President
- ^ **Swiss Re Limited** – Independent Non-executive Director
- The Hongkong and Shanghai Banking Corporation Limited** –  
Independent Non-executive Director
- The Tianjin Municipal Committee of the Chinese People's Political Consultative Conference** –  
Member of Standing Committee

*Past major appointments*

**University of Pennsylvania, USA** – Trustee (2006 – 2016)

- ^ **MTR Corporation Limited** – Non-executive Chairman (2003 – 2015)
- ^ **The Wharf (Holdings) Limited** – Independent Non-executive Director (2002 – 2015)
- ^ **UGL Limited** – Non-executive Director (2012 – 2014)
- ^ **Convenience Retail Asia Limited** – Independent Non-executive Director (2001 – 2014)
- Hong Kong Mercantile Exchange Limited** – Independent Non-executive Director (2009 – 2013)
- ^ **China.com Inc** – Chairman (1999 – 2013)
- Ascendas China Commercial Fund Management Limited** – Chairman (2011 – 2012)
- ^ **CDC Software Corporation** – Director (2009 – 2012)
- The Hong Kong/European Union Business Cooperation Committee** – Chairman (2005 – 2012)
- ^ **CDC Corporation** – Chairman (1999 – 2011)
- HSBC Private Equity (Asia) Limited** – Chairman (1997 – 2010)
- The APEC Business Advisory Council** – Hong Kong Member (2004 – 2009)
- ^ **Inchcape plc** – Independent Non-executive Director (1997 – 2009)
- ^ **HSBC Holdings plc** – Independent Non-executive Director (1998 – 2007)
- Independent Commission Against Corruption** –  
Chairman of Advisory Committee on Corruption (1998 – 2006)
- Executive Council of HKSAR Government** – Member (1997 – 2002)
- Executive Council of Hong Kong, then under British Administration** – Member (1992 – 1997)

*Qualification*

Doctoral Degree in Economics – University of Pennsylvania, USA

*Major awards*

Chevalier de l'Ordre du Merite Agricole of France (2008)

Gold Bauhinia Star (1999)

Commander in the Most Excellent Order of the British Empire (1994)

**Ms Rose LEE Wai Mun JP**  
Vice-Chairman and Chief Executive

Aged 64

Joined the Board since March 2012

Other positions held within Hang Seng Group

- ^ **Hang Seng Bank Limited** –  
Chairman of Executive Committee; Member of Nomination Committee
- Hang Seng Bank (China) Limited** – Chairman; Member of Executive Committee
- Hang Seng Indexes Company Limited** – Chairman of Hang Seng Index Advisory Committee
- Hang Seng Insurance Company Limited** – Chairman
- Chairman of other subsidiaries in Hang Seng Group

Other major appointments

**Justice of the Peace**

- ^ **CK Hutchison Holdings Limited** – Independent Non-executive Director
- Guangdong's Association for Promotion of Cooperation between Guangdong, Hongkong & Macao** – Executive Vice Chairman of the Finance Professional Committee
- Hang Seng Management College** – Chairman of the Board of Governors
- Hang Seng School of Commerce** – Chairman of the Board of Directors
- Ho Leung Ho Lee Foundation** – Member of Board of Trustees
- Hong Kong Trade Development Council** –  
Member of the Financial Services Advisory Committee
- ^ **HSBC Holdings plc** – Group General Manager
- Inaugural Financial Consulting Committee for Authority of Qianhai Shenzhen - Hong Kong Modern Service Industry Cooperation Zone of Shenzhen** – Vice Chairman
- Qianhai & Shekou Area of Shenzhen, China (Guangdong) Pilot Free Trade Zone, and Qianhai Shenzhen-Hong Kong Modern Service Industry Cooperation Zone of Shenzhen** –  
Member of the Consulting Committee
- ^ **Swire Pacific Limited** – Independent Non-executive Director; Member of Remuneration Committee
- The Community Chest of Hong Kong** – Board Member; Deputy Chairman of Executive Committee
- The Hongkong and Shanghai Banking Corporation Limited** – Director
- The Hong Kong Institute of Bankers** – Vice President
- The Hong Kong University of Science and Technology** – Member of the Court
- The University of Hong Kong, New College of Jockey Club Student Village III** –  
Member of the Advisory Committee

Past major appointments

**The Community Chest of Hong Kong** –

Second Vice President; Chairman of the Campaign Committee (2014 – 2016)

**Hutchison Whampoa Limited** (*withdrawal of listing in 2015*) –

Independent Non-executive Director (2012 – 2015)

**City University of Hong Kong** – Member of the Advisory Committee of the Centre for Transportation, Trade and Financial Studies (2012 – 2013)

**Hong Kong Shipowners' Association** –

Honorary Treasurer; Member of the Executive Committee (2009 – 2013)

**Hong Kong General Chamber of Commerce** –

Vice-Chairman of the China Committee (2006 – 2013)

**Bank of Shanghai** – Director (2006 – 2012)

**Hong Kong Trade Development Council** –

Member of the China Trade Advisory Committee (2007 – 2011)

**HKSAR Government Education and Manpower Bureau** –

Member of the Continuing Education Fund China Business Focus Group (2002 – 2009)

**The Hong Kong Institute of Bankers** –

Member of the China Development Committee (2005 – 2007)

**Hong Kong Monetary Authority –**

Member of the PRC Offshore Financing Consultative Committee (1998 – 2000)

**The Hongkong and Shanghai Banking Corporation Limited –**

joined Corporate Finance Department of Wardley Limited in 1977, seconded to Area Office China, HSBC in 1979, appointed Deputy Chief Executive, China Business (1994 – 2002), Managing Director of Hongkong Bank China Services Limited (1985 – 2004), Head of Corporate Banking, Hong Kong (2002 – 2004), Head of Corporate and Institutional Banking, Hong Kong (2004 – 2007), Head of Corporate Banking, Hong Kong and China (2007 – 2008), Head of Global Banking, China and Hong Kong (2008 – 2009) and Advisor, China and Hong Kong (2009 – 2012)

Qualifications

Bachelor's Degree in Business Administration – The University of Hawaii, USA

Fellow – The Hong Kong Institute of Bankers

**Dr John CHAN Cho Chak GBS, JP**

Independent Non-executive Director

Aged 73

Joined the Board since August 1995

Other positions held within Hang Seng Group

^ **Hang Seng Bank Limited –**

Chairman of Remuneration Committee; Member of Nomination Committee

Other major appointments

**Justice of the Peace**

^ **Guangdong Investment Limited –** Independent Non-executive Director

**Long Win Bus Company Limited –** Non-executive Director

^ **RoadShow Holdings Limited –** Chairman and Non-executive Director

^ **Swire Properties Limited –** Independent Non-executive Director

**The Community Chest of Hong Kong –** Board Member; Member of Executive Committee

**The Hong Kong University of Science and Technology –** Chairman of the Court

**The Kowloon Motor Bus Company (1933) Limited –** Non-executive Director

^ **Transport International Holdings Limited –**

Deputy Chairman and Independent Non-executive Director

Past major appointments

**The Community Chest of Hong Kong –**

Third Vice President (2014 – 2015)

Chairman of Public Relations Committee (2014 – 2015)

Vice Patron (2004 – 2011)

**Hong Kong Monetary Authority –**

Member of The Exchange Fund Advisory Committee (2008 – 2014)

**Sir Edward Youde Memorial Fund –** Chairman of the Council (2007 – 2013)

**The Hong Kong Jockey Club –** Chairman (2006 – 2010)

**HKSAR Commission on Strategic Development –** Non-Official Member (2005 – 2009)

^ **Hong Kong Exchanges and Clearing Limited –**

Independent Non-executive Director (2000 – 2003)

**Hong Kong Civil Service –** Private Secretary to the Governor; Deputy Secretary (General Duties);

Director of Information Services; Deputy Chief Secretary; Secretary for Trade and Industry;

Secretary for Education and Manpower (1964 – 1978; 1980 – 1993)

Qualifications

Degree of Doctor of Social Sciences (honoris causa) – Lingnan University; The University of Hong Kong; The Hong Kong University of Science and Technology  
Degree of Doctor of Business Administration (honoris causa) – International Management Centres  
Diploma in Management Studies – The University of Hong Kong  
Honours Degree in English Literature – The University of Hong Kong

Major award

Gold Bauhinia Star (1999)

**Mr Nixon CHAN Lik Sang**

Non-executive Director

Aged 64

Joined the Board since January 2014

Other major appointment

**Anti-Money Laundering and Counter-Terrorist Financing (Financial Institutions) Review Tribunal** – Member

Past major appointments

**Employers' Federation of Hong Kong** –

Chairman of Banking and Financial Services Group (2013 – 2016)

**EPS Company (Hong Kong) Limited** – Director (2011 – 2016)

**^ Hang Seng Bank Limited** –

Executive Director (2014 – 2016)

Head of Retail Banking and Wealth Management (2011 – 2016)

Member of Executive Committee (2009 – 2016)

Head of Corporate and Commercial Banking (2009 – 2011)

**Hang Seng Management College** – Governor (2010 – 2016)

**Hang Seng School of Commerce** – Director (2009 – 2016)

**TransUnion Limited** – Director (2011 – 2016)

**MasterCard Asia/Pacific Advisory Board** – Director (2012 – 2015)

**Small and Medium Enterprises Committee** – Member (2009 – 2014)

**The Hongkong and Shanghai Banking Corporation Limited** –

Senior Executive, Commercial Banking (2005 – 2009)

Held various senior positions in commercial banking and personal financial services (1993 – 2005)

Qualification

Bachelor's Degree in Business Administration – The University of Hawaii, USA

**Mr Patrick CHAN Kwok Wai**  
Executive Director and Head of Greater China

Aged 60

Joined the Board since February 2016

Other positions held within Hang Seng Group

- ^ **Hang Seng Bank Limited** – Member of Executive Committee
- Hang Seng Bank (China) Limited** –  
Non-executive Director; Member of Executive Committee

Other major appointments

**Hang Seng Management College** – Governor; Chairman of Finance Committee  
**Hang Seng School of Commerce** – Director; Chairman of Finance Committee  
**Standing Committee on Language Education and Research** – Member  
**The ACCA Hong Kong** – Member of Professional Development Sub-committee  
**The Foundation of Tsinghua University Center for Advanced Study Co. Ltd.** –  
Member of Investment Committee

Past major appointments

- The Community Chest of Hong Kong** – Board Member (2013 – 2016)
- The Chamber of Hong Kong Listed Companies** –  
Deputy Chairman of General Committee (2015)  
Member of General Committee (2009 – 2015)
- ^ **Sun Hung Kai Properties Limited** –  
Executive Director and Chief Financial Officer (2009 – 2015)
- ^ **Hang Seng Bank Limited** –  
Executive Director and General Manager (2005 – 2009)  
Chief Financial Officer (1998 – 2009)  
Deputy General Manager (2003 – 2005)  
Assistant General Manager and Head of Financial Control Division (1995 – 1998)
- ^ **Industrial Bank Co., Ltd.** –  
Director and Member of Executive Committee (2004 – 2009)  
Member of Remuneration Committee (2007 – 2009)  
Member of Credit Card Centre Management Committee (2005 – 2009)

Qualifications

Associate Financial Planner – The Institute of Financial Planners of Hong Kong  
Associate – The Institute of Chartered Secretaries and Administrators, UK  
Fellow – CPA Australia  
Fellow – The Association of Chartered Certified Accountants, UK  
Fellow – The Hong Kong Institute of Certified Public Accountants  
Master of Business Administration – The University of Warwick, UK  
Member – The Society of Trust and Estate Practitioners, UK

**Dr Henry CHENG Kar Shun GBS**  
Independent Non-executive Director

Aged 70

Joined the Board since May 2014

Other major appointments

- ^ **Chow Tai Fook Jewellery Group Limited** – Chairman and Executive Director
- ^ **FSE Engineering Holdings Limited** – Chairman and Non-executive Director
- ^ **HKR International Limited** – Independent Non-executive Director
- ^ **International Entertainment Corporation** – Chairman and Executive Director
- ^ **New World China Land Limited** – Chairman and Managing Director
- ^ **New World Department Store China Limited** – Chairman and Non-executive Director
- ^ **New World Development Company Limited** – Chairman and Executive Director
- ^ **Newton Resources Ltd** – Chairman and Non-executive Director
- ^ **NWS Holdings Limited** – Chairman and Executive Director
- ^ **SJM Holdings Limited** – Non-executive Director
- ^ **The Better Hong Kong Foundation** – Chairman of the Advisory Council
- ^ **The Twelfth National Committee of Chinese People’s Political Consultative Conference** – Standing Committee Member

Past major appointment

- ^ **Lifestyle International Holdings Limited** – Non-executive Director (2004 – 2015)

Qualifications

Honorary Doctor of Business Administration in Hospitality Management –  
The Johnson & Wales University, USA  
Honorary Doctor of Laws – The University of Western Ontario, Canada  
Doctor of Social Sciences (honoris causa) – The University of Hong Kong

Major Award

Gold Bauhinia Star (2001)



**Ms CHIANG Lai Yuen JP**  
Independent Non-executive Director

Aged 51

Joined the Board since September 2010

Other position held within Hang Seng Group

^ **Hang Seng Bank Limited** – Member of Remuneration Committee

Other major appointments

**Justice of the Peace**

**Aviation Development and Three-runway System Advisory Committee** – Member

^ **Chen Hsong Holdings Limited** – Executive Director; Chief Executive Officer

**Chen Hsong Investments Limited** – Director

**China Shenzhen Machinery Association** – Vice-President

**Federation of Shenzhen Industries** – Vice-Chairman

**Hospital Authority** – Board Member

**The Hong Kong University of Science and Technology** – Member of the Court

**The Shenzhen Committee of the Chinese People’s Political Consultative Conference** –  
Member of Standing Committee

**The Toys Manufacturers’ Association of Hong Kong** – Vice-President

Past major appointments

**Directorate Salaries and Conditions of Service of HKSAR Government** –

Member of Standing Committee (2008 – 2014)

**The Hong Kong University of Science and Technology** – Member of the Council (2006 – 2012)

**The Open University of Hong Kong** – Member of the Council (2006 – 2012)

**Disciplined Services Salaries and Conditions of Service of HKSAR Government** –

Member of Standing Committee (2005 – 2010)

Qualification

Bachelor Degree of Arts – Wellesley College, USA

Major award

“Young Industrialist Awards of Hong Kong” by the Federation of Hong Kong Industries (2004)

**Mr Andrew FUNG Hau Chung JP**  
Executive Director and Head of Global Banking and Markets

Aged 59

Joined the Board since October 2011

Other positions held within Hang Seng Group

- ^ **Hang Seng Bank Limited** – Member of Executive Committee
- Hang Seng Bullion Company Limited** – Director
- Hang Seng Indexes Company Limited** – Member of Hang Seng Index Advisory Committee
- Hang Seng Insurance Company Limited** – Director
- Hang Seng Investment Management Limited** – Director and General Manager
- Hang Seng Investment Services Limited** – Director
- Hang Seng Life Limited** – Director
- Hang Seng Qianhai Fund Management Company Limited** – Director (*Note 1*)
- Hang Seng Securities Limited** – Executive Director

Other major appointments

**Justice of the Peace**

**Airport Authority Hong Kong** – Board Member

**Central Policy Unit of HKSAR Government** – Associate Member

**HKSAR Government Environment Bureau** – Member of Energy Advisory Committee

**Hong Kong Institute of Certified Public Accountants** – Lay Member of the Council

**Hospital Authority** – Board Member

**Independent Commission on Remuneration for Members of the Executive Council and the Legislature, and Officials under the Political Appointment System of HKSAR Government** – Member

**Labour Department** – Member of the Protection of Wages on Insolvency Fund Board

**The Community Chest of Hong Kong** – Board member

**The Liaoning Shenyang Committee of the Chinese People's Political Consultative Conference** – Member

**Treasury Markets Association** – Member of the Executive Board

Past major appointments

- ^ **Industrial Bank Co., Ltd.** –  
Director; Member of Strategic Committee; Member of Remuneration and Evaluation Committee (2009 – 2016) (*Note 1*)
- Securities and Futures Commission** –  
Member of Products Advisory Committee (2010 – 2016)  
Member of Process Review Panel (2006 – 2012)
- The Hong Kong Mortgage Corporation Limited** – Director (2010 – 2015)
- Business Facilitation Advisory Committee** – Non-official member (2009 – 2013)
- The Federation of Hong Kong Industries** – Member of General Committee (2007 – 2013)
- Central Policy Unit of HKSAR Government** –  
Pan-Pearl River Delta Panel – Member (2011 – 2012)
- Hong Kong Trade Development Council** –  
Member of the Financial Services Advisory Committee (2008 – 2012)
- ^ **Hang Seng Bank Limited** –  
Executive Director and Head of Treasury and Investment (2011 – 2012)  
General Manager and Head of Treasury and Investment (2009 – 2011)  
General Manager and Head of Investment and Insurance (2008 – 2009)  
Deputy General Manager and Head of Investment and Insurance (2006 – 2008)
- DBS Bank (Hong Kong) Limited** –  
Managing Director, Advisory Sales, Greater China, Wholesale Banking – Global Financial Markets (2002 – 2006)

- ^ **Commonwealth Bank of Australia, Hong Kong Branch** –  
Treasurer and Head of Capital Markets, Asia (1996 – 2002)  
**The Hongkong and Shanghai Banking Corporation Limited** –  
Head of Hong Kong Dollar Markets (1991 – 1996)

Qualifications

Bachelor of Arts Degree – The University of Hong Kong  
Honorary Fellowship – Lingnan University

**Dr HU Zuli, Fred**

Independent Non-executive Director

Aged 53

Joined the Board since May 2011

Other position held within Hang Seng Group

- ^ **Hang Seng Bank Limited** – Member of Risk Committee

Other major appointments

**China Medical Board** – Trustee

- ^ **Dalian Wanda Commercial Properties Co., Ltd.** –

Independent Non-executive Director

- ^ **Hong Kong Exchanges and Clearing Limited** –

Independent Non-executive Director; Member of Investment Advisory Committee; Member of  
Nomination Committee; Member of Project Oversight Committee

**National Center for Economic Research at Tsinghua University** –

Director and Professor

**Primavera Capital Limited** – Founder and Chairman

- ^ **Shanghai Pudong Development Bank Co., Ltd.** – External Supervisor

**The Nature Conservancy Asia Pacific Region** – Co-Chairman

**Yale-China Association** – Trustee

- ^ **YUM China Holdings, Inc.** –

Non-executive Chairman; Chairman of Nominating and Governance Committee (*Note 1*)

Past major appointments

- ^ **Great Wall Pan Asia Holdings Limited (formerly known as “Armada Holdings Limited”)** –

Independent Non-executive Director (2010 – 2016)

**Securities and Futures Commission** –

Member of Advisory Committee (2009 – 2011)

**Goldman Sachs Group Inc.** –

Chairman of Greater China (2008 – 2010)

Managing Director (2000 – 2010)

**HKSAR Commission on Strategic Development** –

Member (2007 – 2009)

- ^ **Shanghai Pudong Development Bank Co., Ltd.** –

Independent Director (2002 – 2008)

Qualifications

Master of Arts and Doctor of Philosophy in Economics –  
Harvard University, USA

Master of Science in Engineering Science – Tsinghua University, PRC

**Ms Irene LEE Yun Lien**  
Independent Non-executive Director

Aged 63

Joined the Board since May 2014

Other positions held within Hang Seng Group

^ **Hang Seng Bank Limited** – Chairman of Risk Committee; Member of Audit Committee

Other major appointments

- ^ **Cathay Pacific Airways Limited** –  
Independent Non-executive Director;  
Chairman of Audit Committee and Remuneration Committee
- ^ **CLP Holdings Limited** –  
Independent Non-executive Director;  
Member of Audit Committee, Finance & General Committee, and Sustainability Committee
- ^ **Hysan Development Company Limited** –  
Executive Chairman; Chairman of Nomination Committee and Strategy Committee
- ^ **HSBC Holdings plc** – Independent Non-executive Director
- ^ **Noble Group Limited** –  
Independent Non-executive Director;  
Member of Audit Committee, Investment & Capital Markets Committee, Nominating Committee  
and Risk Committee
- The Hongkong and Shanghai Banking Corporation Limited** –  
Independent Non-executive Director; Member of Audit Committee; Member of Risk Committee

Past major appointments

- JP Morgan Australia** – Member of Advisory Council (2005 – 2013)
- ^ **QBE Insurance Group Limited** – Non-executive Director (2002 – 2013)
- ^ **Keybridge Capital Limited** –  
Non-executive Chairman (2009 – 2012)  
Executive Chairman (2006 – 2009)
- The Myer Family Company Pty Limited** – Non-executive Director (2009 – 2011)
- ING Bank (Australia) Limited** – Non-executive Director (2005 – 2011)
- Australian Government Takeovers Panel** – Member (2001 – 2010)
- Sealcorp Holdings Limited** – Chief Executive Officer (1998 – 1999)
- ^ **Commonwealth Bank of Australia** – Head of Corporate Finance (1993 – 1998)
- Citicorp Investment Bank Limited in New York, London and Sydney** –  
Executive Director (1977 – 1987)

Qualifications

Bachelor of Arts Degree – Smith College, USA  
Barrister-at-Law in England and Wales  
Member – The Honourable Society of Gray’s Inn, UK

**Ms Sarah Catherine LEGG**

Non-executive Director

*Aged 49*

*Joined the Board* since February 2011

*Other major appointments*

- ^ **HSBC Holdings plc** – Group General Manager; Group Financial Controller
- The Hong Kong Society for Rehabilitation** – Honorary Vice-President

*Past major appointments*

- The Hong Kong Association of Banks** –
  - Acting Chairman (2015)
  - Chairman of the Basel Implementation Committee (2012 and 2015)
- The Hong Kong Society for Rehabilitation** –
  - Honorary Treasurer (2006 – 2015)
- The Hongkong and Shanghai Banking Corporation Limited** –
  - Alternate Chief Executive (2010 – 2015)
  - Chief Financial Officer (2010 – 2015)
  - Chief Accounting Officer (2006 – 2010)
- HSBC Bank (Taiwan) Limited** – Director (2011 – 2015)
- HSBC Securities Investments (Asia) Limited** – Director (2006 – 2015)
- HSBC Bank Bahamas Limited** – President (2010 – 2014)
- HSBC Markets (Bahamas) Limited** – President (2010 – 2014)
- HSBC Asia Holdings BV** – Director (2011 – 2013)
- ^ **HSBC Holdings plc** –
  - Senior Manager, Finance Transformation (2003 – 2006)
- HSBC Bank plc** –
  - Head of Product Control, Global Banking and Markets (1999 – 2003)

*Qualifications*

Master of Arts – King’s College, Cambridge University, UK  
Fellow – Chartered Institute of Management Accountants  
Fellow – Association of Corporate Treasurers

**Dr Eric LI Ka Cheung** GBS, OBE, JP

Independent Non-executive Director

*Aged 63*

*Joined the Board* since February 2000

*Other positions held within Hang Seng Group*

- ^ **Hang Seng Bank Limited** – Chairman of Audit Committee; Member of Risk Committee

*Other major appointments*

- Justice of the Peace**
- ^ **China Resources Beer (Holdings) Company Limited** –
  - Independent Non-executive Director; Chairman of Audit Committee
- Independent Commission on Remuneration for the Members of the District Councils of HKSAR Government** – Chairman
- Legal Aid Services Council** – Chairman
- Li, Tang, Chen & Co, Certified Public Accountants** – Senior Partner
- Long Win Bus Company Limited** – Director
- ^ **RoadShow Holdings Limited** – Independent Non-executive Director; Chairman of Audit Committee

- ^ **SmarTone Telecommunications Holdings Limited** –  
Independent Non-executive Director; Chairman of Audit Committee
- ^ **Sun Hung Kai Properties Limited** –  
Independent Non-executive Director; Chairman of Audit Committee
- The Education University of Hong Kong Foundation** – Member of the Board of Stewards
- The Financial Reporting Council** – Member of Honorary Advisory Panel
- The Hong Kong Jockey Club** – Steward; Chairman of Audit Committee
- The Kowloon Motor Bus Company (1933) Limited** – Director
- The Twelfth National Committee of the Chinese People’s Political Consultative Conference** –  
Member
- ^ **Transport International Holdings Limited** –  
Independent Non-executive Director; Chairman of Audit Committee
- ^ **Wong’s International Holdings Limited** –  
Independent Non-executive Director; Chairman of Audit Committee

*Past major appointments*

- The Education University of Hong Kong** –  
Chairman of Finance Committee; Treasurer of the Council (2009 – 2015)
- The Presidium of the Election of Deputies of the Hong Kong Special Administrative Region to the Twelfth National People’s Congress** – Member (2013)
- ^ **Bank of Communications Co., Ltd.** –  
Independent Non-executive Director; Chairman of Audit Committee (2007 – 2013)
- The Financial Reporting Council** –  
Convenor and Member of Financial Reporting Review Committee (2007 – 2013)
- HKSAR Commission on Strategic Development** – Member (2007 – 2013)
- Hong Kong Monetary Authority** – Chairman of Process Review Committee (2004 – 2010)
- Meadville Holdings Limited** –  
Independent Non-executive Director; Chairman of Remuneration Committee (2007 – 2010)
- The International Federation of Accountants** –  
Board Member (2004 – 2006)
- The Legislative Council of Hong Kong** –  
Member (1991 – 2004); Chairman of Public Accounts Committee (1995 – 2004)

*Qualifications*

BA (Economics) Honours Degree – University of Manchester, UK  
 Fellow – Hong Kong Institute of Certified Public Accountants (Practising)  
 Hon Doctor of Laws – University of Manchester, UK  
 Hon Doctor of Social Sciences – Hong Kong Baptist University  
 Hon Doctor of Social Sciences – The Education University of Hong Kong  
 Hon Fellow – The Chinese University of Hong Kong  
 Hon Fellow – The Hong Kong Polytechnic University

*Major awards*

Gold Bauhinia Star (2003)  
 Officer of the Most Excellent Order of the British Empire (1996)

**Dr Vincent LO Hong Sui** GBS, JP  
Non-executive Director

Aged 68

Joined the Board since February 1999

Other major appointments

**Justice of the Peace**

**Business and Professionals Federation of Hong Kong** – Honorary Life President

**Chongqing Municipal Government** – Economic Adviser

**Council for the Promotion and Development of Yangtze** – President

^ **Great Eagle Holdings Limited** – Non-executive Director

**Hong Kong Trade Development Council** – Chairman

**Shanghai Tongji University; Shanghai University** – Advisory Professorship

**Shui On Group** – Chairman

^ **Shui On Land Limited** – Chairman

^ **SOCAM Development Limited** – Chairman

**The Hong Kong University of Science and Technology** – Honorary Court Chairman

**The Twelfth National Committee of the Chinese People’s Political Consultative Conference** – Member

Past major appointments

**Airport Authority Hong Kong** –

Chairman (2014 – 2015)

Board Member (2013 – 2015)

**Lantau Development Advisory Committee of HKSAR Government** –

Non-official Member (2014 – 2015)

**APEC Business Advisory Council** – Hong Kong’s Representative (2010 – 2014)

^ **Shui On Land Limited** – Chief Executive Officer (2004 – 2011)

^ **China Telecom Corporation Limited** – Independent Non-executive Director (2002 – 2008)

^ **New World China Land Limited** – Independent Non-executive Director (1999 – 2004)

**The Hong Kong University of Science and Technology** – Chairman of the Council (1999 – 2002)

**Hong Kong General Chamber of Commerce** – Chairman (1991 – 1992)

**Basic Law Consultative Committee** – Executive Committee Member (1985 – 1990)

Qualifications

Doctorate in Business Administration (honoris causa) –

The Hong Kong University of Science and Technology

Doctor of Business (honoris causa) – The University of New South Wales, Australia

Major awards

Lifetime Achievement Award for Leadership in Property Sector by the 4th World Chinese Economic Forum (2012)

“Ernst & Young Entrepreneur Of The Year 2009” in the China Real Estate Sector (2009)

Ernst & Young China Entrepreneur Of The Year 2009 (2009)

Chevalier des Arts et des Lettres by the French Government (2005)

Director of the Year in the category of Listed Company Executive Directors by The Hong Kong Institute of Directors in 2002 (2002)

Businessman of the Year award in the Hong Kong Business Awards 2001 (2001)

Gold Bauhinia Star (1998)

**Mr Kenneth NG Sing Yip**

Non-executive Director

*Aged 66*

*Joined the Board* since March 2014

*Other major appointments*

**Competition Tribunal Users' Committee of HKSAR Government** – Member

**Hong Kong General Chamber of Commerce** – Vice Chairman of Legal Committee

**HSBC Bank (China) Company Limited** – Non-executive Director

**HSBC Bank (Vietnam) Ltd.** – Chairman of Board of Supervision

**The University of Hong Kong** –

Member of Asian Institute of International Financial Law Advisory Board of the Faculty of Law

*Past major appointments*

**Standing Committee on Company Law Reform** – Member (2011 – 2017) (*Note 1*)

**The Law Society of Hong Kong** – Council Member (2002 – 2016)

**The Hongkong and Shanghai Banking Corporation Limited** –

General Counsel, Asia Pacific (1998 – 2016)

Deputy Head of Legal and Compliance Department (1993 – 1998)

Assistant Group Legal Adviser (1987 – 1993)

**Board of Review of Inland Revenue Ordinance of HKSAR Government** – Member (2008 – 2014)

^ **Ping An Insurance (Group) Company of China, Ltd.** –

Non-executive Director (2006 – 2013)

*Qualifications*

Bachelor's Degree and Master's Degree in Laws (L.L.B. and L.L.M.) – University of London, UK

Bachelor's Degree in Laws (L.L.B.) – Beijing University, PRC

**Mr Richard TANG Yat Sun SBS, JP**

Independent Non-executive Director

*Aged 64*

*Joined the Board* since August 1995

*Other positions held within Hang Seng Group*

^ **Hang Seng Bank Limited** – Member of Audit Committee

**Hang Seng Bank (China) Limited** – Supervisor

*Other major appointments*

**Justice of the Peace**

**China Overseas Friendship Association** – Executive Director-General

**Customs and Excise Service Children's Education Trust Fund** –

Chairman of Investment Advisory Board

**Fight Crime Committee** – Member

**Hong Kong Commercial Broadcasting Company Limited** – Director

**Hong Kong Institute of Certified Public Accountants** – Member of Investigation Panel A

^ **King Fook Holdings Limited** – Vice Chairman

^ **Miramar Hotel & Investment Company, Limited** – Director

**Richcom Company Limited** – Chairman and Managing Director

**Tang Shiu Kin and Ho Tim Charitable Fund** – Advisor

**The Twelfth National Committee of the Chinese People's Political Consultative Conference** –  
Member

^ **Wheelock and Company Limited** – Independent Non-executive Director



Past major appointments

**Steering Committee of HKSAR Government Scholarship Fund** – Member (2008 – 2014)

**Customs and Excise Service Children’s Education Trust Fund Committee** –

Chairman (2006 – 2012)

**Hong Kong Institute of Certified Public Accountants** –

Member of Disciplinary Panel A (2006 – 2012)

**Correctional Services Children’s Education Trust** –

Chairman of Investment Advisory Board (2006 – 2011)

Qualifications

Bachelor of Science Degree in Business Administration – Menlo College, California, USA

Master’s Degree in Business Administration – University of Santa Clara, California, USA

Major awards

Silver Bauhinia Star (2016)

Bronze Bauhinia Star (2000)

**Mr Peter WONG Tung Shun JP**

Non-executive Director

Aged 65

Joined the Board since May 2005

Other position held within Hang Seng Group

^ **Hang Seng Bank Limited** – Member of Nomination Committee

Other major appointments

**Justice of the Peace**

^ **Bank of Communications Co., Ltd.** – Vice Chairman and Non-executive Director

^ **Cathay Pacific Airways Limited** – Independent Non-executive Director

**Chongqing Mayor’s International Economic Advisory Council** – Member

**Economic Development Commission of HKSAR Government** – Non-official Member

**Hong Kong General Chamber of Commerce** – Vice Chairman; Member of General Committee

**Hong Kong Monetary Authority** – Member of The Exchange Fund Advisory Committee

**HSBC Bank (China) Company Limited** – Chairman and Non-executive Director; Chairman of Nomination Committee; Member of Remuneration Committee

**HSBC Bank Malaysia Berhad** – Non-Independent Executive Director

^ **HSBC Holdings plc** – Group Managing Director; Member of Group Management Board

**International Consultative Conference on the Future Economic Development of Guangdong Province** – Economic Advisor to the Governor of Guangdong Province of the People’s Republic of China

**Our Hong Kong Foundation Limited** – Special Counsellor

**Qianhai & Shekou Area of Shenzhen, China (Guangdong) Pilot Free Trade Zone, and Qianhai Shenzhen-Hong Kong Modern Service Industry Cooperation Zone of Shenzhen** –

Member of the Consulting Committee (*Note 1*)

**The Community Chest of Hong Kong** –

Board Member; First Vice President; Chairman of Executive Committee

**The Eleventh Hubei Provincial Committee of the Chinese People’s Political Consultative Conference** – Member; Member of Standing Committee

**The Hongkong and Shanghai Banking Corporation Limited** –

Deputy Chairman and Chief Executive; Executive Director

**The Hong Kong Institute of Bankers** – President

**The Twelfth National Committee of the Chinese People’s Political Consultative Conference** – Member

Past major appointments

- International Advisor to the Mayor of Tianjin** (2010 – 2013)  
**Greater Pearl River Delta Business Council** – Member (2006 – 2013)  
**HSBC Bank (Vietnam) Ltd** – Vice-Chairman and Non-executive Director (2010 – 2012)  
^ **Ping An Insurance (Group) Company of China, Ltd.** – Non-executive Director (2006 – 2012)  
**Hong Kong Institute for Monetary Research** – Member of the Board of Directors (2010 – 2011)  
**HSBC Bank Australia Limited** – Non-executive Director (2010 – 2011)  
^ **Hong Kong Exchanges and Clearing Limited** – Member of Risk Management Committee (2010)  
**Hong Kong Trade Development Council** –  
Chairman of Financial Services Advisory Committee (2006 – 2010)  
**Hong Kong Monetary Authority** – Member of Banking Advisory Committee (2005 – 2010)  
**The Hong Kong Association of Banks** – Chairman (2001, 2004, 2006 and 2009)

Qualifications

Bachelor's Degree in Computer Science; MBA in Marketing and Finance; MSc in Computer Science – Indiana University, USA  
Fellow – The Hong Kong Management Association

**Mr Michael WU Wei Kuo**

Independent Non-executive Director

Aged 46

Joined the Board since September 2010

Other positions held within Hang Seng Group

- ^ **Hang Seng Bank Limited** – Member of Audit Committee; Member of Nomination Committee

Other major appointments

- Hongkong Caterers Limited** – Executive Director and Company Secretary  
^ **Hongkong Land Holdings Limited** – Non-executive Director  
^ **Jardine Matheson Holdings Limited** – Non-executive Director  
**Maxim's Caterers Limited** – Chairman and Managing Director  
**The Hong Kong University of Science and Technology** – Member of the Council  
**The University of Hong Kong** – Member of the Court

Past major appointments

**The Community Chest of Hong Kong** –  
Board Member (2010 – 2016)  
Member of Executive Committee (2012 – 2016)

Qualification

Bachelor of Science in Applied Mathematics and Economics – Brown University, USA

Major Awards

“Ernst & Young Entrepreneur of The Year 2012 China” – Category Winner (Services) and Country Winner (Hong Kong / Macau Regions) (2012)  
Executive Award of the DHL / SCMP Hong Kong Business Awards (2008)

- ^ The securities of these companies are listed on a securities market in Hong Kong or overseas.

Notes:

- 1 New appointments or cessation of appointments since the date of the Bank's 2016 Interim Report.
- 2 The interests of Directors in shares of the Bank, if any, within the meaning of Part XV of the Securities and Futures Ordinance ("SFO") as at 31 December 2016 are disclosed in the section "Directors' and Alternate Chief Executives' Interests" of the Report of the Directors attached to the Bank's 2016 Annual Report.
- 3 Some Directors (as disclosed in the section "Biographical Details of Directors and Senior Management – Board of Directors" of the Bank's 2016 Annual Report) are also Directors of HSBC Holdings plc ("HSBC") and/or its subsidiaries. HSBC, through its wholly owned subsidiaries, has an interest in the shares of the Bank under the provisions of Divisions 2 and 3 of Part XV of the SFO, the details of which are disclosed in the section "Substantial Interests in Share Capital" of the Report of the Directors attached to the Bank's 2016 Annual Report.
- 4 Save as disclosed in the section "Biographical Details of Directors and Senior Management – Board of Directors" of the Bank's 2016 Annual Report, the Directors (a) have not held any directorships in other publicly listed companies, whether in Hong Kong or overseas, during the last 3 years; (b) do not hold any other positions in the Bank and its subsidiaries; and (c) do not have any other relationships with any Directors, senior management or substantial or controlling shareholders of the Bank, except that Mr Michael W K Wu's spouse is the niece of Dr Vincent H S Lo, a Non-executive Director of the Bank.
- 5 All Directors (except those Directors who are full time employees of the Bank or its subsidiaries) will receive Directors' fees in the amounts approved from time to time by shareholders at the Annual General Meetings of the Bank. The current amounts of Directors' fees have been determined with reference to market rates, directors' workload and required commitment. A Director will also receive a fee for duties assigned to and services provided by him/her as Chairman or member of various Committees of the Bank. Such fees have been determined with reference to the remuneration policy of the Bank.
- 6 No Directors' fees are payable to those Directors who are full time employees of the Bank or its subsidiaries. The salary packages of such Directors have been determined with reference to the remuneration policy of the Bank. Such Directors are also entitled to discretionary bonus.
- 7 The details of the emoluments of the Directors on a named basis are disclosed in Note 16 of the Bank's Financial Statements as contained in the Bank's 2016 Annual Report.
- 8 None of the Directors, except Ms Rose W M Lee, Mr Patrick K W Chan and Mr Andrew H C Fung, has signed service contracts with the Bank. The term of appointment of Non-executive Directors (including Independent Non-executive Directors) is three years except that where a Non-executive Director (or an Independent Non-executive Director) has served on the Board for more than nine years, then his/her term of appointment is one year.
- 9 Biographical details of Directors of the Bank are also available on the website of the Bank at [www.hangseng.com](http://www.hangseng.com).

# BIOGRAPHICAL DETAILS OF DIRECTORS AND SENIOR MANAGEMENT

## Senior Management

### **Ms Rose LEE Wai Mun JP**

Vice-Chairman and Chief Executive

(Biographical details are set out on pages 114-115)

### **Mr Patrick CHAN Kwok Wai**

Executive Director and Head of Greater China

(Biographical details are set out on page 117)

### **Mr Andrew FUNG Hau Chung JP**

Executive Director and Head of Global Banking and Markets

(Biographical details are set out on pages 120-121)

### **Mrs Eunice CHAN**

Chief Operating Officer

*Aged 54*

*Joined the Bank* since March 2016

#### *Major positions held within Hang Seng Group*

##### **Hang Seng Bank Limited –**

Chief Operating Officer; Member of Executive Committee

##### **Hang Seng Real Estate Management Limited – Director**

##### **Hang Seng Security Management Limited – Director**

#### *Past major positions*

##### **The Hongkong and Shanghai Banking Corporation Limited –**

Head of Operations Asia Pacific (2015 – 2016)

Regional Head of Service Delivery Asia Pacific (2012 – 2015)

Head of Service Delivery Hong Kong (2011 – 2012)

Head of Securities Operations Centre (2007 – 2011)

Senior Manager, Network Services Centre Operations (2004 – 2007)

Manager, Implementation (Payment and Cash Management) (2001 – 2004)

#### *Qualification*

Bachelor of Arts (Major in Economics) – University of Brandon, Canada

**Ms Ivy CHAN Shuk Pui**

Chief Risk Officer

Aged 51

Joined the Bank since July 2014

Major positions held within Hang Seng Group

**Hang Seng Bank Limited** –

Chief Risk Officer; Member of Executive Committee

**Hang Seng Security Management Limited** – Director

Past major positions

**The Hongkong and Shanghai Banking Corporation Limited** –

Chief Risk Officer, HSBC Bank (Taiwan) Limited (2010 – 2014)

Senior Manager of Credit Risk Management Department (2005 – 2010)

Senior Relationship Manager of Credit Risk Management Department (2002 – 2005)

Treasury Credit Risk Manager (1997 – 2001)

Various positions in HSBC in the areas of Trade Services, Retail Banking, Corporate Banking

Relationship Manager, Credit Operations (1988 – 1997)

Qualification

Professional Diploma in Company Secretaryship and Administration –

The Hong Kong Polytechnic University

**Ms Margaret KWAN Wing Han**

Head of Retail Banking and Wealth Management

Aged 57

Joined the Bank since January 1995

Major positions held within Hang Seng Group

**Hang Seng Bank Limited** –

Head of Retail Banking and Wealth Management; Member of Executive Committee

**Hang Seng Indexes Company Limited** –

Member of Hang Seng Index Advisory Committee

**Hang Seng Insurance Company Limited** – Director

Past major positions

**Hang Seng Bank Limited** –

Head of Consumer Assets (2013 – 2016)

Head of Unsecured Loans (2005 – 2013)

Senior Marketing and Business Development Manager, Unsecured Lending (2002 – 2005)

Senior Marketing Communications Manager (2001 – 2002)

Manager, Marketing Communications (1995 – 2001)

**Standard Chartered Bank** – Advertising Manager (1990 – 1994)

Qualification

Bachelor of Social Sciences in Business Studies – The University of Hong Kong

**Mr Donald LAM Yin Shing**  
Head of Commercial Banking

*Aged 53*

*Joined the Bank* since March 2003

*Major positions held within Hang Seng Group*

**Hang Seng Bank Limited** –

Head of Commercial Banking; Member of Executive Committee

**Hang Seng Insurance Company Limited** – Director

*Past major positions*

**Hang Seng Bank Limited** –

Head of Commercial Banking Relationship Management (2005 – 2006)

Deputy Head of Commercial Banking Relationship Management (2004 – 2005)

Department Head, Commercial Banking Relationship Management Department A (2003 – 2004)

**Playmates Holdings Limited** – Executive Director and Chief Financial Officer (2001 – 2003)

**The Hongkong and Shanghai Banking Corporation Limited** –

Senior Marketing and Planning Manager (1999 – 2001)

Held various senior positions in Corporate and Commercial Banking (1987 – 1999)

*Qualifications*

Associate – The Hong Kong Institute of Bankers

Bachelor of Social Science (1st Class Honor) – The University of Hong Kong

Master of Business Administration – The Chinese University of Hong Kong

Master of Science in e-Commerce – The Chinese University of Hong Kong

**Mr Gordon LAM Wai Chung**

Vice-Chairman and Chief Executive of Hang Seng Bank (China) Limited

*Aged 57*

*Joined the Bank* since October 2012

*Major positions held within Hang Seng Group*

**Hang Seng Bank Limited** – Member of Executive Committee

**Hang Seng Bank (China) Limited** –

Vice-Chairman and Chief Executive; Chairman of Executive Committee

*Past major positions*

**Hang Seng Bank (China) Limited** –

First Deputy Chief Executive and Head of Network (2012 – 2013)

Deputy Chief Executive, Head of Business Development, Corporate and Commercial Banking (2012)

**HSBC Bank (China) Company Limited** –

Managing Director and Head of Global Banking (2007 – 2011)

Chief Credit Officer (2003 – 2007)

**China Banking Regulatory Commission Shanghai Office** –

Leader of the Foreign Bank Basel II Working Committee (2007)

**The Hong Kong Association of Banks** –

Chairman of Preparatory Committee for Hong Kong Commercial Credit Reference Agency (2003)

**The Hongkong and Shanghai Banking Corporation Limited** –

Senior Manager, Credit Risk Management, Asia Pacific (1988 – 2003)

**Hong Kong Chamber of Commerce in China** – One of Founding members (1993 – 1994)

Qualification

Bachelor of Business Administration – The Chinese University of Hong Kong

**Mr Andrew LEUNG Wing Lok**

Chief Financial Officer

Aged 54

Joined the Bank in July 1997 (left in 2006) and rejoined in July 2009

Major positions held within Hang Seng Group

**Hang Seng Bank Limited** –

Chief Financial Officer; Member of Executive Committee

**Hang Seng Bank (China) Limited** – Director

**Hang Seng Insurance Company Limited** – Director

**Hang Seng Investment Management Limited** – Chairman

Past major positions

**Bank of China (Hong Kong) Limited** –

Deputy General Manager, Financial Management (2007 – 2009)

**Hang Lung Properties Limited** –

Senior Manager, Corporate Finance (2006 – 2007)

**Hang Seng Bank Limited** –

Senior Manager and Deputy Head of China Business (2005 – 2006)

Senior Manager and Deputy Head of Greater China Business (2003 – 2005)

Senior Manager of Corporate Banking (2001 – 2003)

Senior Manager and Deputy Head of Financial Control (1997 – 2001)

Qualifications

Associate – The Hong Kong Institute of Chartered Secretaries

Associate – The Institute of Chartered Secretaries and Administrators, UK

Bachelor of PRC Law – Peking University, PRC

Bachelor of Social Sciences (Major in Management) – The University of Hong Kong

Chartered Professional Accountant, Canada (CPA (Canada), CMA)

Fellow – The Association of Chartered Certified Accountants, UK

Fellow – The Hong Kong Institute of Certified Public Accountants

Master of Science, Data processing – University of Ulster, UK

Master of Science in Electronic Commerce and Internet Computing – The University of Hong Kong

**Ms Elaine WANG Yee Ning**

Head of Human Resources

*Aged 55*

*Joined the Bank* since June 2016

*Major positions held within Hang Seng Group*

**Hang Seng Bank Limited** –

Head of Human Resources; Member of Executive Committee

*Past major positions*

**The Hongkong and Shanghai Banking Corporation Limited** –

Regional Head of Development and Regional Head of Talent (2014 – 2016)

Regional Head of Human Resources, Retail Banking and Wealth Management, Asia Pacific (2011 – 2014)

Head of Human Resources, HSBC China (2009 – 2011)

**BP Asia Limited** –

Vice President, Human Resources China & Gas Asia Pacific Business Unit (2005 – 2008)

Regional Human Resources Manager (2002 – 2004)

Head of Human Resources, BP Amoco Chemicals Asia Pacific (1992 – 2001)

*Qualifications*

Master of Health Services Management –

The University of New South Wales, Australia

Bachelor of Applied Science – The University of Sydney, Australia

Note:

Definition of senior management is set out in the “Corporate Governance Report” section in this Annual Report.



## **REPORT OF THE DIRECTORS**

The Directors have pleasure in presenting their report together with the audited financial statements for the year ended 31 December 2016.

### **Principal Place of Business**

The Bank is incorporated and domiciled in Hong Kong and has its registered office and principal place of business at 83 Des Voeux Road Central, Hong Kong.

### **Principal Activities and Business Review**

The Bank and its subsidiaries (the “Group”) are engaged in the provision of banking and related financial services. Further discussion and analysis of these activities as required by Schedule 5 to the Hong Kong Companies Ordinance, including a fair review of the business and a discussion of the principal risks and uncertainties facing the Group, particulars of important events affecting the Group that have occurred since the end of the financial year 2016, an indication of likely future development in the Group’s business, a discussion of the Group’s environmental policies and performance, and its compliance with the relevant laws and regulations that have a significant impact on the Group and an account of the Group’s key relationships with its employees, customers and suppliers that have a significant impact on the Group can be found in the “Five-Year Financial Summary”, “Chairman’s Statement”, “Chief Executive’s Report”, “Management Discussion and Analysis”, “Corporate Sustainability” and “Corporate Governance Report” sections of this Annual Report. The above sections form part of this report.

### **Profits and Dividends**

The consolidated profit of the Bank and its subsidiaries and associates for the year is set out under the consolidated income statement of this Annual Report.

The Directors declared and paid the first to third interim dividends of HK\$3.30 (2015: HK\$3.30) per share totalling HK\$6,309m (2015: HK\$6,309m) during the year. The Directors also declared the fourth interim dividend of HK\$2.80 per share totalling HK\$5,353m (2015: HK\$2.40 per share totalling HK\$4,588m, and a special interim dividend of HK\$3.00 per share totalling HK\$5,736m), which will be paid on 28 March 2017.

### **Major Customers**

The Directors believe that the five largest customers of the Bank accounted for less than 30% of the total interest income and other operating income of the Bank for the year.

### **Subsidiaries**

Particulars of the Bank’s principal subsidiaries as at 31 December 2016 are set out in note 34 to the financial statements for the year ended 31 December 2016.

### **Share Capital**

Details of share capital of the Bank during the year are set out in note 48 to the financial statements for the year ended 31 December 2016.

### **Equity-linked Agreements**

For the year ended 31 December 2016, the Bank has not entered into any equity-linked agreement.

### **Purchase, Sale or Redemption of the Bank’s Listed Securities**

There was no purchase, sale or redemption by the Bank, or any of its subsidiaries, of the Bank’s listed securities during the year.

## **Reserves**

Profit attributable to shareholders, before dividends, of HK\$16,212m (2015: 27,494m) has been transferred to reserves. Distributable reserve of the Bank as at 31 December 2016 amounted to HK\$72,270m (2015: HK\$69,780m). Other movements in reserves are set out in the consolidated statement of changes in equity of this Annual Report.

## **Donations**

Charitable donations made by the Bank and its subsidiaries during the year amounted to HK\$24m. For further details of the Bank's corporate social responsibility activities and expenditures, please refer to the "Corporate Sustainability" section of this Annual Report.

## **Directors**

The Directors of the Bank who were in office on the date of this report were Dr Raymond K F Ch'ien, Ms Rose W M Lee, Dr John C C Chan, Mr Nixon L S Chan, Mr Patrick K W Chan, Dr Henry K S Cheng, Ms L Y Chiang, Mr Andrew H C Fung, Dr Fred Zulu Hu, Ms Irene Y L Lee, Ms Sarah C Legg, Dr Eric K C Li, Dr Vincent H S Lo, Mr Kenneth S Y Ng, Mr Richard Y S Tang, Mr Peter T S Wong and Mr Michael W K Wu. Save for Mr Patrick K W Chan, who was appointed as Executive Director with effect from 19 February 2016, all the other Directors had served on the Board of the Bank throughout the year.

The Directors retiring by rotation in accordance with the Bank's Articles of Association are Dr Raymond K F Ch'ien, Mr Nixon L S Chan, Ms L Y Chiang, Ms Sarah C Legg, Mr Kenneth S Y Ng and Mr Michael W K Wu who, being eligible, offer themselves for re-election at the Bank's Annual General Meeting to be held on 12 May 2017 ("2017 AGM").

No Director proposed for re-election at the forthcoming AGM has a service contract with the Bank which is not determinable by the Bank within one year without payment of compensation (other than statutory compensation).

The biographical details of the Directors of the Bank are set out in the "Biographical Details of Directors and Senior Management" section of this Annual Report.

## **Directors of Subsidiaries**

The names of all Directors who have served on the Boards of the Bank's subsidiaries during the period from 1 January 2016 to the date of this report (unless otherwise stated) are provided in the "Directors of Subsidiaries" section of this Annual Report.

## **Status of Independent Non-executive Directors**

The Bank has received from each Independent Non-executive Director an annual confirmation of his/her independence pursuant to Rule 3.13 of the Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited (the "Stock Exchange") (the "Listing Rules"). The Bank still considers all the Independent Non-executive Directors to be independent.

## Directors' and Alternate Chief Executives' Interests

As at 31 December 2016, the interests of the Directors and Alternate Chief Executives in the shares, underlying shares of equity derivatives and debentures of the Bank and its associated corporations (all within the meaning of Part XV of the Securities and Futures Ordinance ("SFO")) disclosed in accordance with the Listing Rules were detailed below.

### Interests in shares

	Personal Interests (held as beneficial owner)	Family Interests (interests of spouse or child under 18)	Corporate Interests (interests of controlled corporation)	Other Interests	Total Interests	Total Interests as % of the relevant shares in issue/ issued share capital
<b>Number of ordinary shares in the Bank</b>						
<u>Director:</u>						
Dr John C C Chan	1,000 <sup>(1)</sup>	-	-	-	1,000	0.00
<u>Alternate Chief Executive:</u>						
Ms Margaret W H Kwan	65	-	-	-	65	0.00
<b>Number of ordinary shares of US\$0.50 each in HSBC Holdings plc</b>						
<u>Directors:</u>						
Dr Raymond K F Ch'ien	58,572	-	-	-	58,572	0.00
Ms Rose W M Lee	447,898	1,717	-	192,320 <sup>(4)</sup>	641,935	0.00
Dr John C C Chan	24,605 <sup>(1)</sup>	-	-	-	24,605	0.00
Mr Nixon L S Chan	118,302	-	-	33,495 <sup>(4)</sup>	151,797	0.00
Mr Patrick K W Chan	93,697	-	-	-	93,697	0.00
Mr Andrew H C Fung	98,757	-	-	34,186 <sup>(4)</sup>	132,943	0.00
Ms Irene Y L Lee	10,000	-	-	-	10,000	0.00
Ms Sarah C Legg	159,798	2,695	-	105,007 <sup>(4)</sup>	267,500	0.00
Dr Eric K C Li	-	54,405	-	-	54,405	0.00
Mr Kenneth S Y Ng	402,937	-	-	39,219 <sup>(4)</sup>	442,156	0.00
Mr Peter T S Wong	959,803	23,040	-	2,339,197 <sup>(4)</sup>	3,322,040	0.02
<u>Alternate Chief Executives:</u>						
Mrs Eunice L C Y Chan	18,670	-	-	13,613 <sup>(4)</sup>	32,283	0.00
Ms Margaret W H Kwan	18,973	-	-	4,590 <sup>(4)</sup>	23,563	0.00
Mr Donald Y S Lam	80,526	-	-	18,727 <sup>(4)</sup>	99,253	0.00
Mr Andrew W L Leung	12,530	-	-	22,942 <sup>(4)</sup>	35,472	0.00
<b>Number of perpetual non-cumulative preference shares of US\$0.01 each in HSBC Holdings plc</b>						
<u>Director:</u>						
Ms Rose W M Lee	-	131,000 <sup>(2)</sup>	-	75,075 <sup>(2)</sup>	206,075	0.14

	Personal Interests (held as beneficial owner)	Family Interests (interests of spouse or child under 18)	Corporate Interests (interests of controlled corporation)	Other Interests	Total Interests	Total Interests as % of the relevant shares in issue/issued share capital
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Alternate Chief

Executive:

Ms Margaret W H Kwan	-	15,000 <sup>(3)</sup>	-	-	15,000	0.02
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Interests in debentures of associated corporation of the Bank

	Personal Interests (held as beneficial owner)	Family Interests (interests of spouse or child under 18)	Corporate Interests (interests of controlled corporation)	Other Interests	Total Interests
--	---	--	---	-----------------	-----------------

**8.00% perpetual subordinated capital securities, series 2 issued by HSBC Holdings plc**

Director:

Ms Rose W M Lee	-	US\$3,275,000 <sup>(2)</sup>	-	US\$1,876,875 <sup>(2)</sup>	US\$5,151,875
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**8.125% perpetual subordinated capital securities issued by HSBC Holdings plc**

Alternate Chief

Executive:

Ms Margaret W H Kwan	-	US\$375,000 <sup>(3)</sup>	-	-	US\$375,000
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Notes:

- (1) 1,000 shares in the Bank and 4,371 shares in HSBC Holdings plc were jointly held by Dr John C Chan and his wife.
- (2) Ms Rose W M Lee was a beneficiary of a trust, which had interests in the total principal amount of US\$1,876,875 of the 8.00% perpetual subordinated capital securities, series 2. Her spouse also had interests in the total principal amount of US\$3,275,000 of the 8.00% perpetual subordinated capital securities, series 2. These perpetual subordinated capital securities were exchangeable at the option of HSBC Holdings plc to 75,075 and 131,000 perpetual non-cumulative preference shares respectively of US\$0.01 each in HSBC Holdings plc. Ms Lee's interests set out in the table under "Interests in shares" and the table under "Interests in debentures of associated corporation of the Bank" represented the same interests.
- (3) Ms Margaret W H Kwan's spouse had interests in the total principal amount of US\$375,000 of the 8.125% perpetual subordinated capital securities. These perpetual subordinated capital securities were exchangeable at the option of HSBC Holdings plc to 15,000 perpetual non-cumulative preference shares of US\$0.01 each in HSBC Holdings plc. Ms Kwan's interests set out in the table under "Interests in shares" and the table under "Interests in debentures of associated corporation of the Bank" represented the same interests.

- (4) These included interests in conditional awards of ordinary shares of US\$0.50 each in HSBC Holdings plc under the HSBC Share Plans made in favour of Directors and Alternate Chief Executives.

#### Conditional Awards of Shares

During the year, the Directors and Alternate Chief Executives as set out below were eligible to be granted conditional awards over ordinary shares of US\$0.50 each in HSBC Holdings plc by that company (being the ultimate holding company of the Bank) under various HSBC Share Plans. The details of the interests of the Directors and Alternate Chief Executives in the conditional awards of ordinary shares in HSBC Holdings plc under the HSBC Share Plans, as at 31 December 2016, were as follows:

	Awards held as at 1 January 2016	Awards made during the Director's/Alternate Chief Executive's term of office in 2016	Awards released during the Director's/Alternate Chief Executive's term of office in 2016	Awards held as at 31 December 2016
<u>Directors:</u>				
Ms Rose W M Lee	137,241	123,320	83,532	192,320 <sup>(1)</sup>
Mr Nixon L S Chan	26,216	44,445	40,018	33,495 <sup>(1)</sup>
Mr Andrew H C Fung	29,723	42,855	41,369	34,186 <sup>(1)</sup>
Ms Sarah C Legg	68,781	75,809	47,910	105,007 <sup>(1)</sup>
Mr Kenneth S Y Ng	38,903	46,405	49,628	39,219 <sup>(1)</sup>
Mr Peter T S Wong	1,222,917	384,857	393,152	1,315,716 <sup>(1)</sup>
<u>Alternate Chief Executives:</u>				
Mrs Eunice L C Y Chan	12,818 <sup>(2)</sup>	-	-	13,613 <sup>(1)</sup>
Ms Margaret W H Kwan	4,468 <sup>(3)</sup>	-	-	4,590 <sup>(1)</sup>
Mr Donald Y S Lam	12,635	26,666	22,126	18,727 <sup>(1)</sup>
Mr Andrew W L Leung	11,318	36,840	27,033	22,942 <sup>(1)</sup>

#### Notes:

- (1) These included additional shares arising from scrip dividends.
- (2) This represented the awards held by Mrs Eunice L C Y Chan on 11 April 2016 when she was appointed an Alternate Chief Executive of the Bank.
- (3) This represented the awards held by Ms Margaret W H Kwan on 22 July 2016 when she was appointed as Alternate Chief Executive of the Bank.

During the year, Ms Sarah C Legg, Mrs Eunice L C Y Chan and Mr Donald Y S Lam also acquired and were awarded ordinary shares of HSBC Holdings plc under the HSBC International Employee Share Purchase Plan. Their interests in ordinary shares of HSBC Holdings plc under this plan have been included in their "Personal Interests" disclosed in the table under "Interests in shares".

All the interests stated above represented long positions. As at 31 December 2016, no short positions were recorded in the Register of Directors' and Alternate Chief Executives' Interests and Short Positions required to be kept under section 352 of the SFO.

Save as disclosed in the preceding paragraphs, neither the Bank nor any of its holding companies or its subsidiaries or fellow subsidiaries was a party to any arrangement to enable the Directors of the Bank to acquire benefits by means of the acquisition of shares in or debentures of the Bank or any other body corporate as at the end of the year or at any time during the year.

No right to subscribe for equity or debt securities of the Bank has been granted by the Bank to, nor have any such rights been exercised by, any person during the year ended 31 December 2016.

### **Directors' Interests in Transactions, Arrangements or Contracts**

No transaction, arrangement or contract (that is significant in relation to the Bank's business), to which the Bank or any of its holding companies or any of its subsidiaries or fellow subsidiaries was a party and in which a Director of the Bank or an entity connected with a Director had, directly or indirectly, a material interest, subsisted as at the end of the year or at any time during the year.

### **Management Contracts**

Save for service contracts, no other contracts, relating to the management and/or administration of the whole or any substantial part of the business of the Bank were entered into or subsisting during the year.

### **Directors' Interests in Competing Businesses**

Pursuant to Rule 8.10 of the Listing Rules, as at the date of this report, the following Directors had declared interests in the following entities which compete or are likely to compete, either directly or indirectly, with the businesses of the Bank:

Ms Rose W M Lee is a Group General Manager of HSBC Holdings plc and a Director of The Hongkong and Shanghai Banking Corporation Limited.

Ms Sarah C Legg is a Group General Manager and Group Financial Controller of HSBC Holdings plc.

Mr Kenneth S Y Ng is a Director of HSBC Bank (China) Company Limited and the Chairman of Board of Supervision of HSBC Bank (Vietnam) Ltd. Both companies are wholly-owned subsidiaries of The Hongkong and Shanghai Banking Corporation Limited.

Mr Peter T S Wong is a Group Managing Director and a member of Group Management Board of HSBC Holdings plc. He is also the Deputy Chairman, Chief Executive and Executive Director of The Hongkong and Shanghai Banking Corporation Limited; Chairman and Non-executive Director of HSBC Bank (China) Company Limited; and Non-Independent Executive Director of HSBC Bank Malaysia Berhad. Both HSBC Bank (China) Company Limited and HSBC Bank Malaysia Berhad are wholly-owned subsidiaries of The Hongkong and Shanghai Banking Corporation Limited. He is the Vice-Chairman and Non-executive Director of Bank of Communications Co., Ltd., which conducts general banking business.

HSBC Holdings plc, through its subsidiaries and associated undertakings, including The Hongkong and Shanghai Banking Corporation Limited, the immediate holding company of the Bank, is engaged in providing a comprehensive range of banking, insurance and related financial services.

The entities in which the Directors have declared interests are managed by separate Boards of Directors and management, which are accountable to their respective shareholders.

The Board of the Bank includes nine Independent Non-executive Directors whose views carry significant weight in the Board's decisions. The Audit Committee and Risk Committee of the Bank, which consist of four and three Independent Non-executive Directors respectively, meet regularly to assist the Board of Directors in reviewing the financial performance, internal control and risk management systems of the Bank and its subsidiaries. The Bank is, therefore, capable of carrying on

its businesses in the best interests of all shareholders as a whole and has put in place adequate mechanisms to ensure that the Directors discharge their duties vis-a-vis all shareholders, including in respect of the Bank's dealings with the businesses in which Directors have declared interests.

### **Directors' Emoluments**

The emoluments of the Directors of the Bank (including Executive Directors and Independent Non-executive Directors) on a named basis are set out in note 16 to the financial statements for the year ended 31 December 2016.

### **Indemnity Provision**

Details of the Bank's permitted indemnity provision are set out in the "Corporate Governance Report" of this Annual Report.

### **Substantial Interests in Share Capital**

The register maintained by the Bank pursuant to the SFO recorded that, as at 31 December 2016, the following corporations had interests or short positions in the shares or underlying shares (as defined in the SFO) in the Bank set opposite their respective names:

Name of Corporation	Number of Ordinary Shares in the Bank (Percentage of total)
The Hongkong and Shanghai Banking Corporation Limited	1,188,057,371 (62.14%)
HSBC Asia Holdings BV	1,188,057,371 (62.14%)
HSBC Asia Holdings (UK) Limited	1,188,057,371 (62.14%)
HSBC Holdings BV	1,188,057,371 (62.14%)
HSBC Finance (Netherlands)	1,188,057,371 (62.14%)
HSBC Holdings plc	1,188,057,371 (62.14%)

The Hongkong and Shanghai Banking Corporation Limited is a wholly-owned subsidiary of HSBC Asia Holdings BV, which is a wholly-owned subsidiary of HSBC Asia Holdings (UK) Limited, which in turn is a wholly-owned subsidiary of HSBC Holdings BV. HSBC Holdings BV is a wholly-owned subsidiary of HSBC Finance (Netherlands), which in turn is a wholly-owned subsidiary of HSBC Holdings plc. Accordingly, the interests of The Hongkong and Shanghai Banking Corporation Limited are recorded as the interests of HSBC Asia Holdings BV, HSBC Asia Holdings (UK) Limited, HSBC Holdings BV, HSBC Finance (Netherlands) and HSBC Holdings plc.

The Directors regard HSBC Holdings plc to be the beneficial owner of 1,188,057,371 ordinary shares in the Bank (62.14%).

All the interests stated above represented long positions. As at 31 December 2016, no short positions were recorded in the Register of Interests in Shares and Short Positions required to be kept under section 336 of the SFO.

### **Public Float**

As at the date of this report, the Bank has maintained the prescribed public float under the Listing Rules, based on the information that is publicly available to the Bank and within the knowledge of the Directors of the Bank.

### **Corporate Governance Principles and Practices**

Details of the Bank's corporate governance practices are set out in the "Corporate Governance Report" in this Annual Report.

**Auditor**

KPMG resigned as auditor of the Bank upon signing the Auditor's Report of the 2014 financial statements on 23 February 2015. PricewaterhouseCoopers was appointed as auditor of the Bank with effect from 23 February 2015 to fill the vacancy and their appointment was also approved by shareholders of the Bank at the AGM held in 2015. At the AGM held in 2016, PricewaterhouseCoopers was re-appointed as auditor of the Bank to hold office until conclusion of the 2017 AGM.

The financial statements for the year ended 31 December 2016 have been audited by PricewaterhouseCoopers who will retire and, being eligible, offer themselves for re-appointment. A resolution for the re-appointment of PricewaterhouseCoopers as auditor of the Bank will be proposed at the 2017 AGM.

On behalf of the Board

**Raymond Ch'ien**  
Chairman

Hong Kong, 21 February 2017



## CONSOLIDATED INCOME STATEMENT

for the year ended 31 December 2016

(Expressed in millions of Hong Kong dollars)

		2016	2015
	note		
Interest income	4	26,493	27,063
Interest expense	4	(4,239)	(5,898)
<b>Net interest income</b>		<b>22,254</b>	<b>21,165</b>
Fee income		8,042	8,624
Fee expense		(2,103)	(1,586)
<b>Net fee income</b>	5	<b>5,939</b>	<b>7,038</b>
Net trading income	6	1,685	2,030
Net income/(loss) from financial instruments designated at fair value	7	73	(118)
Gains less losses from financial investments	8	105	16
Dividend income	9	190	142
Net insurance premium income	10	11,059	9,845
Other operating income	11	2,828	3,903
<b>Total operating income</b>		<b>44,133</b>	<b>44,021</b>
Net insurance claims and benefits paid and movement in liabilities to policyholders	12	(13,534)	(12,968)
<b>Net operating income before loan impairment charges and other credit risk provisions</b>		<b>30,599</b>	<b>31,053</b>
Loan impairment charges and other credit risk provisions	13	(1,313)	(1,108)
<b>Net operating income</b>		<b>29,286</b>	<b>29,945</b>
Employee compensation and benefits		(4,807)	(4,893)
General and administrative expenses		(4,226)	(4,522)
Depreciation of premises, plant and equipment		(1,114)	(957)
Amortisation of intangible assets		(105)	(110)
<b>Operating expenses</b>	14	<b>(10,252)</b>	<b>(10,482)</b>
Impairment loss on intangible assets		-	(24)
<b>Operating profit</b>		<b>19,034</b>	<b>19,439</b>
Net gain on partial disposal of Industrial Bank	18	-	10,636
Net (deficit)/surplus on property revaluation	19	(37)	261
Share of profits from associates		93	152
<b>Profit before tax</b>		<b>19,090</b>	<b>30,488</b>
Tax expense	20	(2,886)	(2,994)
<b>Profit for the year</b>		<b>16,204</b>	<b>27,494</b>
<b>Attributable to:</b>			
Shareholders of the company		16,212	27,494
Non-controlling interests		(8)	-
<i>(Figures in HK\$)</i>			
Earnings per share - basic and diluted	21	8.30	14.22

The notes on pages 148 to 238 form part of these financial statements.

## CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME

for the year ended 31 December 2016

(Expressed in millions of Hong Kong dollars)

	2016	2015
<b>Profit for the year</b>	<b>16,204</b>	<b>27,494</b>
<b>Other comprehensive income</b>		
<b>Items that will be reclassified subsequently to the income statement when specific conditions are met:</b>		
Available-for-sale investment reserve:		
- fair value changes taken to equity:		
-- on debt securities	(549)	(416)
-- on equity shares	(127)	183
- fair value changes transferred to income statement:		
-- on hedged items	398	91
-- on disposal	(105)	(14,759)
- share of changes in equity of associates		
-- fair value changes	-	(5)
- deferred taxes	57	19
- exchange difference and others	(179)	(186)
Cash flow hedging reserve:		
- fair value changes taken to equity	781	191
- fair value changes transferred to income statement	(924)	(188)
- deferred taxes	24	(1)
Exchange differences on translation of:		
- financial statements of overseas branches, subsidiaries and associates	(762)	(540)
<b>Items that will not be reclassified subsequently to the income statement:</b>		
Premises:		
- unrealised surplus on revaluation of premises	853	1,878
- deferred taxes	(144)	(314)
- exchange difference	(11)	(7)
Defined benefit plans:		
- actuarial gains on defined benefit plans	127	422
- deferred taxes	(21)	(70)
Others	-	2
<b>Other comprehensive income for the year, net of tax</b>	<b>(582)</b>	<b>(13,700)</b>
<b>Total comprehensive income for the year</b>	<b>15,622</b>	<b>13,794</b>
<b>Total comprehensive income for the year attributable to:</b>		
- shareholders of the company	15,630	13,794
- non-controlling interests	(8)	-
	<u>15,622</u>	<u>13,794</u>

## CONSOLIDATED BALANCE SHEET

at 31 December 2016

(Expressed in millions of Hong Kong dollars)

		2016	2015
	note		
<b>ASSETS</b>			
Cash and sight balances at central banks	26	23,299	10,118
Placings with and advances to banks	27	103,460	123,990
Trading assets	28	44,427	40,373
Financial assets designated at fair value	29	8,523	7,903
Derivative financial instruments	30	16,695	11,595
Loans and advances to customers	31	698,992	688,946
Financial investments	32	398,137	372,272
Interest in associates	35	2,274	2,275
Investment properties	36	9,960	10,075
Premises, plant and equipment	37	26,772	26,186
Intangible assets	38	14,443	12,221
Other assets	39	30,260	28,475
<b>Total assets</b>		<b>1,377,242</b>	<b>1,334,429</b>
<b>LIABILITIES AND EQUITY</b>			
<b>Liabilities</b>			
Current, savings and other deposit accounts	40	989,539	959,228
Repurchase agreements - non-trading		1,805	2,315
Deposits from banks		14,075	18,780
Trading liabilities	41	68,124	62,917
Financial liabilities designated at fair value	42	3,991	3,994
Derivative financial instruments	30	13,303	9,988
Certificates of deposit and other debt securities in issue	43	5,116	5,191
Other liabilities	44	24,765	20,891
Liabilities under insurance contracts	45	108,326	101,817
Current tax liabilities	46	25	185
Deferred tax liabilities	46	5,160	4,817
Subordinated liabilities	47	2,327	2,325
<b>Total liabilities</b>		<b>1,236,556</b>	<b>1,192,448</b>
<b>Equity</b>			
Share capital	48	9,658	9,658
Retained profits		105,204	105,363
Other equity instruments	49	6,981	6,981
Other reserves		18,783	19,979
Total shareholders' equity		140,626	141,981
Non-controlling interests		60	-
<b>Total equity</b>		<b>140,686</b>	<b>141,981</b>
<b>Total equity and liabilities</b>		<b>1,377,242</b>	<b>1,334,429</b>

**Rose W M Lee** *Vice-Chairman and Chief Executive*

**John C C Chan** *Director*

**Eric K C Li** *Director*

**Andrew W L Leung** *Chief Financial Officer*

The notes on pages 148 to 238 form part of these financial statements.

**CONSOLIDATED STATEMENT OF CHANGES IN EQUITY**

for the year ended 31 December 2016

(Expressed in millions of Hong Kong dollars)

	Other reserves								Total share- holders' equity	Non- controlling interests	Total equity
	Share capital	Other equity instruments	Retained profits	Premises revaluation reserve	Available- for-sale investment reserve	Cash flow hedge reserve	Foreign exchange reserve	Others			
At 1 January 2016	9,658	6,981	105,363	16,777	1,939	(9)	600	672	141,981	-	141,981
Profit for the year	-	-	16,212	-	-	-	-	-	16,212	(8)	16,204
Other comprehensive income (net of tax)	-	-	106	698	(505)	(119)	(762)	-	(582)	-	(582)
Available-for-sale investments	-	-	-	-	(505)	-	-	-	(505)	-	(505)
Cash flow hedges	-	-	-	-	-	(119)	-	-	(119)	-	(119)
Property revaluation	-	-	-	698	-	-	-	-	698	-	698
Actuarial gains on defined benefit plans	-	-	106	-	-	-	-	-	106	-	106
Share of other comprehensive income of associates	-	-	-	-	-	-	-	-	-	-	-
Exchange differences and others	-	-	-	-	-	-	(762)	-	(762)	-	(762)
Total comprehensive income for the year	-	-	16,318	698	(505)	(119)	(762)	-	15,630	(8)	15,622
Dividends paid	-	-	(16,633)	-	-	-	-	-	(16,633)	-	(16,633)
Coupon paid to holder of AT1 capital instrument	-	-	(346)	-	-	-	-	-	(346)	-	(346)
Movement in respect of share-based payment arrangements	-	-	9	-	-	-	-	(15)	(6)	-	(6)
Others	-	-	-	-	-	-	-	-	-	68	68
Transfers	-	-	493	(493)	-	-	-	-	-	-	-
At 31 December 2016	9,658	6,981	105,204	16,982	1,434	(128)	(162)	657	140,626	60	140,686
At 1 January 2015	9,658	6,981	88,064	15,687	17,012	(11)	1,140	662	139,193	-	139,193
Profit for the year	-	-	27,494	-	-	-	-	-	27,494	-	27,494
Other comprehensive income (net of tax)	-	-	354	1,557	(15,073)	2	(540)	-	(13,700)	-	(13,700)
Available-for-sale investments	-	-	-	-	(15,068)	-	-	-	(15,068)	-	(15,068)
Cash flow hedges	-	-	-	-	-	2	-	-	2	-	2
Property revaluation	-	-	-	1,557	-	-	-	-	1,557	-	1,557
Actuarial gains on defined benefit plans	-	-	352	-	-	-	-	-	352	-	352
Share of other comprehensive income of associates	-	-	-	-	(5)	-	-	-	(5)	-	(5)
Exchange differences and others	-	-	2	-	-	-	(540)	-	(538)	-	(538)
Total comprehensive income for the year	-	-	27,848	1,557	(15,073)	2	(540)	-	13,794	-	13,794
Dividends paid	-	-	(10,706)	-	-	-	-	-	(10,706)	-	(10,706)
Coupon paid to holder of AT1 capital instrument	-	-	(310)	-	-	-	-	-	(310)	-	(310)
Movement in respect of share-based payment arrangements	-	-	-	-	-	-	-	10	10	-	10
Others	-	-	-	-	-	-	-	-	-	-	-
Transfers	-	-	467	(467)	-	-	-	-	-	-	-
At 31 December 2015	9,658	6,981	105,363	16,777	1,939	(9)	600	672	141,981	-	141,981

## CONSOLIDATED CASH FLOW STATEMENT

for the year ended 31 December 2016

(Expressed in millions of Hong Kong dollars)

		2016	2015
	note		
<b>Cash flows from operating activities</b>			
Cash generated from operating activities	50(a)	3,424	17,282
Interest received from available-for-sale investments		3,048	2,151
Dividends received from available-for-sale investments		188	141
Taxation paid		<u>(3,034)</u>	<u>(3,073)</u>
Net cash inflow from operating activities ( <i>restated</i> )	58	<u>3,626</u>	16,501
<b>Cash flows from investing activities</b>			
Purchase of available-for-sale investments		<u>(83,138)</u>	(110,230)
Purchase of held-to-maturity debt securities		<u>(1,382)</u>	(1,737)
Proceeds from sale or redemption of available-for-sale investments		85,782	107,225
Proceeds from redemption of held-to-maturity debt securities		1,475	780
Net cash inflow from the sales of loan portfolio		389	5,069
Purchase of properties, plant and equipment and intangible assets		<u>(899)</u>	(1,492)
Proceeds from sale of properties, plant and equipment and assets held for sale		-	3
Net cash inflow/(outflow) from investing activities ( <i>restated</i> )	58	<u>2,227</u>	(382)
<b>Cash flows from financing activities</b>			
Dividends paid		<u>(16,633)</u>	(10,706)
Coupon paid to holder of AT1 capital instrument		<u>(346)</u>	(310)
Interest paid for subordinated liabilities		<u>(112)</u>	(156)
Redemption/Repayment of subordinated liabilities		-	(3,492)
Net cash outflow from financing activities		<u>(17,091)</u>	(14,664)
<b>(Decrease)/increase in cash and cash equivalents</b>		<u>(11,238)</u>	1,455
<b>Cash and cash equivalents at 1 January</b>			
Effect of foreign exchange rate changes		<u>(5,758)</u>	(2,408)
<b>Cash and cash equivalents at 31 December</b>	50(b)	<u><u>87,401</u></u>	<u><u>104,397</u></u>

The notes on pages 148 to 238 form part of these financial statements.

## NOTES TO THE FINANCIAL STATEMENTS

For the year ended 31 December 2016

(Figures expressed in millions of Hong Kong dollars unless otherwise indicated)

### 1. Basis of preparation

#### (a) Compliance with Hong Kong Financial Reporting Standards

The consolidated financial statements comprise the financial statements of Hang Seng Bank Limited ("the Bank") and its subsidiaries ("the Group") made up to 31 December 2016. These financial statements have been prepared in accordance with all applicable Hong Kong Financial Reporting Standards ("HKFRS"), the provisions of the Hong Kong Companies Ordinance and accounting principles generally accepted in Hong Kong. HKFRS comprises Hong Kong Financial Reporting Standards, Hong Kong Accounting Standards ("HKAS"), and interpretations issued by the Hong Kong Institute of Certified Public Accountants ("HKICPA"). In addition, these financial statements comply with the applicable disclosure provisions of the Rules Governing the Listing of Securities on The Stock Exchange of Hong Kong Limited. A summary of the principal accounting policies adopted by the Group is set out in note 3.

#### Standards adopted during the year ended 31 December 2016

There were no new standards applied during the year ended 31 December 2016. During 2016, the Group adopted a number of amendments to standards which had an insignificant effect on the consolidated financial statements of the Group.

#### (b) Presentation of information

The following have been included in the audited sections of the "Management Discussion and Analysis" ("MD&A"):

- Disclosure under HKFRS 4 "*Insurance Contracts*" and HKFRS 7 "*Financial Instruments: Disclosures*" concerning the nature and extent of risks relating to insurance contracts and financial instruments on pages 30 to 32.
- Capital disclosures under HKAS 1 "*Presentation of Financial Statements*" on pages 73 to 78.

In accordance with the Group's policy to provide disclosures that help stakeholders understand the Group's performance, financial position and changes thereto, the information provided in the Notes to the Financial Statements and the Risk disclosures in the MD&A goes beyond the minimum levels required by accounting standards, statutory and regulatory requirements.

#### (c) Consolidation

The Group controls and consequently consolidates an entity when it is exposed, or has rights, to variable returns from its involvement with the entity and has the ability to affect those returns through its power over the entity. Control is initially assessed based on consideration of all facts and circumstances, and is subsequently reassessed when there are significant changes to the initial setup.

Where an entity is governed by voting rights, the Group would consolidate when it holds, directly or indirectly, the necessary voting rights to pass resolutions by the governing body. In all other cases, the assessment of control is more complex and requires judgement of other factors, including having exposure to variability of returns, power over relevant activities or holding the power as agent or principal.

All intra-group transactions are eliminated on consolidation.

The consolidated financial statements also include the attributable share of the results and reserves of associates based on the financial statements prepared at dates not earlier than three months prior to 31 December 2016.

## NOTES TO THE FINANCIAL STATEMENTS *(continued)*

### 1. Basis of preparation *(continued)*

#### (d) Future Accounting Developments

The HKICPA has issued a number of amendments and new standards which are not yet effective for the year ended 31 December 2016 and which have not been adopted in the financial statements. Key changes are summarised as follows:

- In September 2014, the HKICPA issued the final HKFRS 9 "*Financial Instruments*", which is the comprehensive standard to replace HKAS 39 "*Financial Instruments: Recognition and Measurement*", and includes requirements for classification and measurement of financial assets and liabilities, impairment of financial assets and hedge accounting.

The classification and measurement of financial assets will depend on the entity's business model for their management and their contractual cash flow characteristics and result in financial assets being classified and measured at amortised cost, fair value through other comprehensive income ("FVOCI") or fair value through profit or loss. The classification of financial liabilities is essentially unchanged, except that, for certain liabilities measured at fair value, gains or losses relating to changes in the entity's own credit risk are to be included in OCI.

The impairment requirements apply to financial assets measured at amortised cost and FVOCI, lease receivables, certain loan commitments and financial guarantee contracts. At initial recognition, impairment allowance (or provision in the case of commitments and guarantees) is required for expected credit losses ("ECL") resulting from default events that are possible within the next 12 months ("12 month ECL"). In the event of a significant increase in credit risk, allowance (or provision) is required for ECL resulting from all possible default events over the expected life of the financial instrument ("lifetime ECL").

The assessment of whether credit risk has increased significantly since initial recognition is performed for each reporting period by considering the probability of default occurring over the remaining life of the financial instrument, rather than by considering an increase in ECL.

As a result of the final HKFRS 9, the recognition and measurement of impairment is intended to be more forward-looking than under HKAS 39.

The general hedge accounting requirements aim to simplify hedge accounting, creating a stronger link between it and risk management strategy and permitting the former to be applied to a greater variety of hedging instruments and risks. The standard does not explicitly address macro hedge accounting strategies, which are being considered in a separate project. To remove the risk of any conflict between existing macro hedge accounting practice and the new general hedge accounting requirements, HKFRS 9 includes an accounting policy choice to remain with HKAS 39 hedge accounting.

The classification and measurement and impairment requirements are applied retrospectively by adjusting the balance sheet at the date of initial application, with no requirement to restate comparative periods. For hedge accounting, based on the analysis performed to date, the Group expects to exercise the accounting policy choice to continue HKAS 39 hedge accounting and therefore is not currently planning to change hedge accounting, although it will implement the revised hedge accounting disclosures required by the related amendments to HKFRS 7 "*Financial Instruments: Disclosures*".

## NOTES TO THE FINANCIAL STATEMENTS *(continued)*

### 1. Basis of preparation *(continued)*

#### (d) Future Accounting Developments *(continued)*

The mandatory application date for the standard as a whole is 1 January 2018, but it is possible to apply the revised presentation for certain liabilities measured at fair value at an earlier date. The Group intends to revise the presentation of fair value gains and losses relating to the entity's own credit risk on certain liabilities in the consolidated financial statements from 1 January 2017. If this presentation was applied at 31 December 2016, the effect would be to increase profit before tax with the opposite effect on other comprehensive income based on the change in fair value attributable to changes in the group's credit risk for the year, with no effect on net assets. Further information on the change in fair value attributable to changes in credit risk, including the Group's credit risk, is disclosed in note 42.

The Group intends to quantify the potential impact of HKFRS 9 once it is practicable to provide reliable estimates.

- In 2014, the HKICPA also issued HKFRS 15 *"Revenue from Contracts with Customers"*. The original effective date of HKFRS 15 has been delayed by one year and the standard is now effective for annual periods beginning on or after 1 January 2018 with early application permitted. HKFRS 15 provides a principles-based approach for revenue recognition, and introduces the concept of recognising revenue obligations as they are satisfied. The standard should be applied retrospectively, with certain practical expedients available.

The Group has assessed the impact of this standard and expects that the standard will not have significant impact, when applied, on the consolidated financial statements of the Group.

- In May 2016, the HKICPA issued HKFRS 16 "Leases" with an effective date of annual periods beginning on or after 1 January 2019. HKFRS 16 results in lessee accounting for most leases within the scope of the standard in a manner similar to the way in which finance leases are currently accounted for under HKAS 17 'Leases'. Lessees will recognise a 'right of use' asset and a corresponding financial liability on the balance sheet. The asset will be amortised over the length of the lease and the financial liability measured at amortised cost. Lessor accounting remains substantially the same as in HKAS 17.

The Group is currently assessing the impact of HKFRS 16 and it is not practicable to quantify the effect as at the date of the publication of these financial statements.

### 2. Critical accounting estimates and judgements in applying accounting policies

The results of the Group are sensitive to the accounting policies, assumptions and estimates that underlie the preparation of the consolidated financial statements. The principal accounting policies are described in Note 3 to the financial statements.

The accounting policies that are deemed critical to our results and financial position, in terms of the materiality of the items to which the policies are applied and the high degree of judgement involved, including the use of assumptions and estimation, are discussed below.



## NOTES TO THE FINANCIAL STATEMENTS *(continued)*

### **2. Critical accounting estimates and judgements in applying accounting policies *(continued)***

#### *(i) Loan impairment charges*

Application of the Group's methodology for assessing loan impairment, as set out in note 3(e), involves considerable judgement and estimation.

For individually assessed loans, judgement is required in determining whether there are indications that an impairment loss may already have been incurred and then estimating the amount and timing of expected cash flows, which form the basis of the impairment loss calculation.

For collectively assessed loans, judgement is involved in selecting and applying the criteria for grouping together loans with similar credit characteristics, as well as in selecting and applying statistical and other models used to estimate the losses incurred for each group of loans in the reporting period. The benchmarking of loss rates, the assessment of the extent to which historical losses are representative of current conditions and the ongoing refinement of modelling methodologies provide a means of identifying changes that may be required, but the process is inherently an estimation.

#### *(ii) Valuation of financial instruments*

The best evidence of fair value is a quoted price in an actively traded principal market. In the event that the market for a financial instrument is not active, and the valuation technique uses only observable market data, the reliability of the fair value measurement is high. However, when valuation techniques include one or more significant unobservable inputs, they rely to a greater extent on management judgement and the fair value derived becomes less reliable. In absence of observable valuation inputs, due to lack of or a reduced volume of similar transactions, management judgement is required to assess the price at which an arm's length transaction would occur under normal business conditions, in which case management may rely on historical prices for that particular financial instrument or on recent prices for similar instruments.

The main assumptions and estimates which management consider when applying a model with valuation techniques are:

- the likelihood and expected timing of future cash flows on the instrument. Judgement may be required to assess the counterparty's ability to service the instrument in accordance with its contractual terms. Future cash flows may be sensitive to changes in market rates;
- selecting appropriate discount rate for the instrument. Judgement is required to assess what a market participant would regard as the appropriate spread of the rate for an instrument over the appropriate risk-free rate; and
- judgement to determine what model to use to calculate fair value in areas where the choice of valuation model is particularly subjective, for example, when valuing complex derivatives.

When applying a model with observable inputs, estimates are made to reflect uncertainties in fair values resulting from a lack of market data inputs, for example, as a result of illiquidity in the market. For these instruments, the fair value measurement is less reliable. Inputs into valuations based on observable data are inherently uncertain because there is little or no current market data available from which to determine the level at which an arm's length transaction would occur under normal business conditions. However, in most cases there is some market data available on which to base a determination of fair value, for example historical data, and the fair values of most financial instruments are based on some market observable inputs even when observable inputs are significant.

The Group's accounting policy for valuation of financial instruments is included in note 3(j) and is discussed further within note 57 "Fair value of financial instruments".

## NOTES TO THE FINANCIAL STATEMENTS *(continued)*

### **2. Critical accounting estimates and judgements in applying accounting policies *(continued)***

#### *(iii) Impairment of available-for-sale financial assets*

Judgement is required in determining whether or not a decline in fair value of an available-for-sale financial investment below its original cost is of such a nature as to constitute impairment, and thus whether an impairment loss needs to be recognised under HKAS 39.

#### *(iv) Held-to-maturity investments*

Non-derivative financial assets with fixed or determinable payments and fixed maturity are classified as held-to-maturity investments if the Group has the intention and ability to hold them until maturity. In evaluating whether the requirements to classify a financial asset as held-to-maturity are met, management makes significant judgements. Failure in correctly assessing the Group's intention and ability to hold specific investments until maturity may result in reclassification of the whole portfolio as available-for-sale.

#### *(v) Insurance contracts*

##### *Classification*

HKFRS 4 requires the Group to determine whether a contract that transfers both insurance risk and financial risk is classified as an insurance contract, or as a financial instrument under HKAS 39, or whether the insurance and non-insurance elements of the contract should be accounted for separately. This process involves judgement and estimation of the amounts of different types of risks that are transferred or assumed under a contract. The estimation of such risks often involves the use of assumptions about future events and is thus subject to a degree of uncertainty.

##### *Present value of in-force long-term insurance business ("PVIF")*

The value of PVIF, which is recorded as an intangible asset, depends upon assumptions regarding future events. These are described in more detail in note 38(a). The assumptions are reassessed at each reporting date and changes in the estimates which affect the value of PVIF are reflected in the income statement.

##### *Insurance liabilities*

The estimation of insurance liabilities involves selecting statistical models and making assumptions about future events which need to be frequently calibrated against experience and forecasts. The sensitivity of insurance liabilities to potential changes in key assumptions is set out in the MD&A.

### **3. Principal accounting policies**

#### **(a) Interest income and expense**

Interest income and expense for all financial instruments are recognised in "Interest income" and "Interest expense" respectively in the income statement using the effective interest rates of the financial assets or financial liabilities to which they relate.

The effective interest rate is the rate that exactly discounts estimated future cash payments or receipts through the expected life of the financial instrument or, where appropriate, a shorter period, to the net carrying amount of the financial asset or financial liability. When calculating the effective interest rate, the Group estimates cash flows considering all contractual terms of the financial instrument but excluding future credit losses. The calculation includes all amounts paid or received by the Group that are an integral part of the effective interest rate of a financial instrument, including transaction costs and all other premiums or discounts.

For impaired financial assets, the accrual of interest income based on the original terms of the financial asset is discounted to arrive at the net present value of impaired financial assets. Subsequent increase of such net present value of impaired financial assets due to the passage of time is recognised as interest income.

## NOTES TO THE FINANCIAL STATEMENTS *(continued)*

### 3. Principal accounting policies *(continued)*

#### **(b) Non-interest income**

##### *(i) Fee income*

Fee income is earned from a diverse range of services provided by the Group to its customers and accounted for as follows:

- income earned on the execution of a significant act is recognised as revenue when the act is completed (for example, fees arising from negotiating, or participating in the negotiation of, a transaction for a third party); and
- income earned from the provision of services is recognised as revenue when the services are provided (for example, asset management).

##### *(ii) Net trading income*

Net trading income comprises all gains and losses from changes in the fair value of financial assets and financial liabilities held for trading and dividend income from equities held for trading. Gains or losses arising from changes in fair value of derivatives are recognised in Net trading income to the extent as described in the accounting policy set out in note 3(g). Gains and losses on foreign exchange trading and other transactions are also reported as Net trading income except for those gains and losses on translation of foreign currencies recognised in other comprehensive income and accumulated separately in equity in the foreign exchange reserve in accordance with the accounting policy set out in note 3(w).

##### *(iii) Net income / (expense) from financial instruments designated at fair value*

Net income / (expense) from financial instruments designated at fair value comprises all gains and losses from changes in the fair value of financial assets and financial liabilities designated at fair value and dividends arising on those financial instruments and the changes in fair value of the derivatives managed in conjunction with the financial assets and liabilities designated at fair value.

##### *(iv) Dividend income*

Dividend income is recognised when the right to receive payment is established. This is the ex-dividend date for listed equity securities, and usually the date when shareholders have approved the dividend for unlisted equity securities.

##### *(v) Rental income from operating lease*

Rental income, net of incentives, under an operating lease is recognised in "Other operating income" in equal instalments over the reporting periods covered by the lease term.

#### **(c) Cash and cash equivalents**

For the purpose of the cash flow statement, cash and cash equivalents include highly liquid investments that are readily convertible into known amounts of cash and which are subject to an insignificant risk of change in value. Such investments comprise cash and sight balances at central banks maturing within one month, treasury bills and certificates of deposit with less than three months' maturity from the date of acquisition and items in the course of collection from or in transmission to other banks.

#### **(d) Loans and advances to customers and placing with and advances to banks**

"Loans and advances to customers" and "Placings with and advances to banks" include loans and advances originated or acquired by the Group, which are not classified as either held for trading or designated at fair value. Loans and advances are recognised when cash is advanced to borrowers and are derecognised when either the borrowers repay their obligations or the loans are sold or written off, or substantially all the risks and rewards of ownership transferred. They are initially recorded at fair value plus any directly attributable transaction costs and are subsequently measured at amortised cost using the effective interest rate method, less impairment allowances.

## NOTES TO THE FINANCIAL STATEMENTS *(continued)*

### 3. Principal accounting policies *(continued)*

#### (e) Impairment of loans and advances

Losses for impaired loans and advances are promptly recognised when there is objective evidence that impairment of a loan or portfolio of loans has occurred.

##### *(i) Individually assessed loans and advances*

For all loans that are considered individually significant, the Group assesses on a case-by-case basis at each reporting date whether there is any objective evidence that a loan is impaired. The criteria used by the Group to determine that there is such objective evidence include:

- known cash flow difficulties experienced by the borrower;
- contractual payments of either principal or interest being past due for more than 90 days;
- the probability that the borrower will enter bankruptcy or other financial realisation;
- a concession granted to the borrower for economic or legal reasons relating to the borrower's financial difficulty that results in the forgiveness or postponement of principal, interest or fees, where the concession is not insignificant; and
- a significant downgrading in credit rating by an external rating agency.

For those loans where objective evidence of impairment exists, impairment losses are determined by considering the following factors:

- the Group's aggregate exposure to the borrower;
- the viability of the borrower's business model and its capacity to trade successfully out of financial difficulties and generate sufficient cash flow to service debt obligations;
- the amount and timing of expected receipts and recoveries;
- the likely dividend available on liquidation or bankruptcy;
- the extent of other creditors' commitments ranking ahead of, or *pari passu* with, the Group and the likelihood of other creditors continuing to support the borrower;
- the complexity of determining the aggregate amount and ranking of all creditor claims and the extent to which legal and insurance uncertainties are evident;
- the realisable value of collateral (or other credit mitigants) and likelihood of successful repossession;
- the likely deduction of any costs involved in recovery of amounts outstanding;
- the ability of the borrower to obtain, and make payments in, the currency of the loan if not denominated in local currency; and
- where available, the secondary market price for the debt.

The realisable value of collateral is based on the most recently updated market value at the time the impairment assessment is performed. The value is not adjusted for expected future changes in market prices, though adjustments are made to reflect local conditions such as forced sale discounts.

Impairment losses are calculated by discounting the expected future cash flows of a loan, which includes expected future receipts of contractual interest, at its original effective interest rate and comparing the resultant present value with the loan's current carrying amount.

##### *(ii) Collectively assessed loans and advances*

Impairment allowances are calculated on a collective basis to cover losses which have been incurred but have not yet been identified:

- as loans subject to individual assessment; or
- for homogeneous groups of loans that are not considered individually significant.

## NOTES TO THE FINANCIAL STATEMENTS *(continued)*

### **3. Principal accounting policies *(continued)***

#### **(e) Impairment of loans and advances *(continued)***

##### *Incurred but not yet identified impairment*

Individually assessed loans for which no evidence of impairment has been specifically identified on an individual basis are grouped together according to their credit risk characteristics for a collective impairment assessment. This reflects impairment losses that the Group has incurred as a result of events occurring before the reporting date, which the Group is not able to identify on an individual loan basis, and that can be reliably estimated. These losses will only be individually identified in the future. As soon as information becomes available which identifies losses on individual loans within the group, those loans are removed from the group and assessed on an individual basis for impairment. The collective impairment allowance is determined after taking into account:

- historical loss experience in portfolios of similar credit risk characteristics (for example, by industry sector, loan grade or product);
- the estimated period between a loss occurring and the loss being identified and evidenced by the establishment of an appropriate allowance against the individual loan; and
- management's judgement as to whether the current economic and credit conditions are such that the actual level of inherent losses at the reporting date is likely to be greater or less than that suggested by historical experience.

##### *Homogeneous groups of loans and advances*

Portfolios of homogeneous groups of loans are collectively assessed using roll rate or historical loss rate methodologies.

##### *(iii) Write-off of loans and advances*

Loans (and the related impairment allowance accounts) are normally written off, either partially or in full, when there is no realistic prospect of recovery. Where loans are secured, this is generally after receipt of any proceeds from the realisation of collateral. In circumstances where the net realisable value of any collateral has been determined and there is no reasonable expectation of further recovery, write-off may be earlier.

##### *(iv) Reversals of impairment*

If, in a subsequent period, the amount of an impairment loss decreases and the decrease can be related objectively to an event occurring after the impairment was recognised, the excess is written back by reducing the loan impairment allowance account accordingly. The write-back is recognised in the income statement.

##### *(v) Repossessed assets*

Non-financial assets acquired in exchange for loans in order to achieve an orderly realisation are reported under "Assets held for sale" if the carrying amounts of the assets are recovered principally through sale, the assets are available for sale in their present condition and the sale is highly probable. The asset acquired is recorded at the lower of its fair value less costs to sell and the carrying amount of the loan, net of impairment allowance amounts, at the date of exchange. No depreciation is provided in respect of assets held for sale. Any subsequent write-down of the acquired asset to fair value less costs to sell is recorded as an impairment loss and included in the income statement. Any subsequent increase in the fair value less costs to sell, to the extent this does not exceed the cumulative impairment loss, is recognised in the income statement.

Financial assets acquired in exchange for loans are classified and reported in accordance with the relevant accounting policies.

## NOTES TO THE FINANCIAL STATEMENTS *(continued)*

### **3. Principal accounting policies *(continued)***

#### **(e) Impairment of loans and advances *(continued)***

##### *(vi) Renegotiated loans*

Loans subject to collective impairment assessment whose terms have been renegotiated are no longer considered past due, but are treated as new loans for measurement purposes once the minimum number of payments required under the new arrangements has been received. A loan that is renegotiated is derecognised if the existing agreement is cancelled and a new agreement made on substantially different terms, or if the terms of an existing agreement are modified, such that the renegotiated loan is substantially a different financial instrument. These renegotiated loans are segregated from other parts of the loan portfolio for the purposes of collective impairment assessment, to reflect their risk profile. Loans subject to individual impairment assessment, whose terms have been renegotiated, are subject to ongoing review to determine whether they remain impaired. The carrying amounts that have been classified as renegotiated loans retain this classification until maturity or derecognition.

#### **(f) Financial instruments designated at fair value**

A financial instrument is classified in this category if it meets any one of the criteria set out below, and is so designated irrevocably on initial recognition:

- eliminates or significantly reduces measurement or recognition inconsistencies that would otherwise arise from measuring financial instruments or recognising the gains and losses on them on different bases.
- applies to a group of financial instruments that is managed and its performance evaluated on a fair value basis, in accordance with a documented risk management or investment strategy, and where information about that group of financial instruments is provided internally on that basis to key management personnel. Under this criterion, certain liabilities under investment contracts and financial assets held to meet liabilities under insurance and investment contracts are the main classes of financial instruments so designated.
- relates to financial instruments containing one or more embedded derivatives, and which would otherwise be required to be accounted for separately.

Designated financial instruments are recognised at fair values when the Group enters into contracts with counterparties, which is generally on trade date, and are normally derecognised when either sold (assets) or extinguished (liabilities). Measurement is initially at fair value, with transaction costs taken to the income statement. Subsequent changes in fair values are recognised in the income statement within "Net income from financial instruments designated at fair value".

#### **(g) Derivative financial instruments and hedge accounting**

Derivatives are recognised initially, and are subsequently remeasured, at fair values. Fair values of derivatives are obtained either from quoted market prices or by using valuation techniques.

Derivatives are classified as assets when their fair values are positive, or as liabilities when their fair values are negative. Derivative assets and liabilities arising from different transactions are only offset for accounting purposes if the offsetting criteria are met, i.e. the transactions are with the same counterparty, a legal right of offset exists, and the parties intend to settle the cash flows on a net basis.

The method of recognising fair value gains or losses depends on whether the derivative is held for trading, or is designated as a hedging instrument, and if the latter, the nature of the risk being hedged. All gains and losses from changes in the fair value of derivatives held for trading are recognised in the income statement.

The Group designates certain derivatives as either (i) hedges of the change in fair value of recognised assets or liabilities or firm commitments ("fair value hedge"); or (ii) hedges of highly probable future cash flows attributable to a recognised asset or liability, or a forecast transaction ("cash flow hedge").

## NOTES TO THE FINANCIAL STATEMENTS *(continued)*

### 3. Principal accounting policies *(continued)*

#### **(g) Derivative financial instruments and hedge accounting** *(continued)*

At the inception of a hedging relationship, the Group documents the relationship between the hedging instruments and the hedged items, its risk management objective and its strategy for undertaking the hedge. The Group requires a documented assessment, both at hedge inception and on an ongoing basis, of whether or not the hedging instruments, are highly effective in offsetting the changes attributable to the hedged risks in the fair values or cash flows of the hedged items.

##### *(i) Fair value hedge*

Changes in the fair value of derivatives that are designated and qualified as fair value hedging instruments are recorded in the income statement within "Net trading income", along with changes in the fair value of the hedged assets or liabilities attributable to the hedged risk.

If the hedging relationship no longer meets the criteria for hedge accounting, the hedge accounting is discontinued. The cumulative adjustment to the carrying amount of a hedged item is amortised to the income statement based on a recalculated effective interest rate over the residual period to maturity, unless the hedged item has been derecognised.

##### *(ii) Cash flow hedge*

The effective portion of changes in the fair value of derivatives that are designated and qualified as cash flow hedges is recognised in other comprehensive income and accumulated separately in equity. Any gain or loss in fair value relating to an ineffective portion is recognised immediately in the income statement within "Net trading income".

The accumulated gains and losses recognised in other comprehensive income are recycled to the income statement in the periods in which the hedged item will affect profit or loss.

When a hedging instrument expires or is sold, or when a hedge no longer meets the criteria for hedge accounting, any cumulative gain or loss at that time remains in equity until the forecast transaction is ultimately recognised in the income statement. When a forecast transaction is no longer expected to occur, the cumulative gain or loss that was recognised in other comprehensive income is immediately reclassified to the income statement.

##### *(iii) Hedge effectiveness testing*

To qualify for hedge accounting, the Group requires that at the inception of the hedge and throughout its life, each hedge must be expected to be highly effective (prospective effectiveness), and demonstrate actual effectiveness (retrospective effectiveness) on an ongoing basis.

The documentation of each hedging relationship sets out how the effectiveness of the hedge is assessed and the method adopted by the Group to assess hedge effectiveness depends on its risk management strategy.

For fair value hedge relationships, the Group utilises the cumulative dollar offset method or regression as effectiveness testing methodology. For cash flow hedge relationships, the Group utilises the change in variable cash flow method, capacity test or the cumulative dollar offset method using the hypothetical derivative approach.

For prospective effectiveness, the hedging instrument is expected to be highly effective in achieving offsetting changes in fair value or cash flows attributable to the hedged risk during the period for which the hedge is designated. For retrospective effectiveness, the change in fair value or cash flows must offset each other in the range of 80% to 125%. Hedge ineffectiveness is recognised in the income statement in "Net trading income".

## NOTES TO THE FINANCIAL STATEMENTS *(continued)*

### **3. Principal accounting policies *(continued)***

#### **(g) Derivative financial instruments and hedge accounting *(continued)***

##### *(iv) Derivatives that do not qualify for hedge accounting*

Non-qualifying hedges are economic hedges entered into as part of documented interest rate management strategies for which hedge accounting is not applied. Changes in fair value of non-qualifying hedges do not alter the cash flows expected as part of the documented management strategies for both the non-qualifying hedge instruments and the related assets and liabilities. All gains and losses from changes in the fair values of derivatives that do not qualify for hedge accounting are recognised immediately in the income statement.

#### **(h) Sale and repurchase agreements**

Where securities are sold subject to commitment to repurchase them at a pre-determined price ("repos"), they remain on the balance sheet and a liability is recorded in respect of the consideration received in "Repurchase agreements-non-trading". Conversely, securities purchased under analogous commitments to resell ("reverse repos") are not recognised on the balance sheet and the consideration paid is recorded in "Reverse repurchase agreements-non-trading". The difference between the sale and repurchase price is treated as interest income and recognised over the life of the agreement.

Securities lending and borrowing transactions are generally secured, with collateral taking the form of securities or cash advanced or received. The transfer of securities to counterparties under these agreements is not normally reflected on the balance sheet. Cash collateral advanced or received is recorded as an asset or a liability respectively.

#### **(i) Financial Investments**

Financial instruments intended to be held on a continuing basis, other than those designated at fair value, are classified as available-for-sale or held-to-maturity.

##### *(i) Available-for-sale financial assets*

Available-for-sale financial assets are initially measured at fair value. They are subsequently remeasured at fair value, and changes therein are recognised in other comprehensive income and accumulated separately in equity in the "Available-for-sale investment reserve". When available-for-sale financial assets are sold, cumulative gains or losses which are previously recognised in other comprehensive income shall be reclassified from equity to the income statement as "Gains less losses from financial investments and fixed assets".

##### *(ii) Held-to-maturity investments*

Held-to-maturity investments are non-derivative financial assets with fixed or determinable payments and fixed maturities that the Group has the positive intention and ability to hold until maturity. Held-to-maturity investments are initially recorded at fair value plus any directly attributable transaction costs, and are subsequently measured at amortised cost using the effective interest rate method, less any impairment allowances.

#### **(j) Valuation of financial instruments**

All financial instruments are recognised initially at fair value. Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. The fair value of a financial instrument on initial recognition is generally its transaction price (that is the fair value of the consideration given or received). However, the fair value will be based on other observable current market transactions in the same instrument, without modification or repackaging, or on a valuation technique whose variables include only data from observable markets, such as interest rate yield curves, option volatilities and currency rates. When such evidence exists, the Group recognises a trading gain or loss on day 1, being the difference between the transaction price and the fair value. When significant unobservable parameters are used, the entire day 1 gain or loss is deferred and is recognised in the income statement over the life of the transaction until the transaction matures, is closed out, the valuation inputs become observable, or when the Group enters into an offsetting transaction.



## NOTES TO THE FINANCIAL STATEMENTS *(continued)*

### **3. Principal accounting policies *(continued)***

#### **(j) Valuation of financial instruments *(continued)***

The fair value of financial instruments is generally measured on an individual basis. However, in cases where the Group manages a group of financial assets and liabilities according to its net market or credit risk exposure, the Group measures the fair value of the group of financial instruments on a net basis but presents the underlying financial assets and liabilities separately in the financial statements, unless they satisfy the HKFRS offsetting criteria.

#### **(k) Impairment of assets**

The carrying amount of the Group's assets are reviewed at each reporting date to determine whether there is objective evidence of impairment. If any such evidence exists, the carrying amount is reduced to the estimated recoverable amount by means of a charge to the income statement.

The accounting policies on impairment losses on loans and receivables and goodwill are set out in notes 3(e) and 3(o) respectively.

##### *(i) Held-to-maturity investments*

For held-to-maturity investments, the impairment loss is measured as the difference between the asset's carrying amount and the present value of estimated future cash flows discounted at the financial asset's original effective interest rate (i.e. the effective interest rate computed at initial recognition of these assets) on an individual basis.

If in a subsequent period the amount of an impairment loss decreases and the decrease can be linked objectively to an event occurring after the impairment loss was recognised, the impairment loss is reversed through the income statement. The reversal of impairment is limited to the asset's carrying amount that would have been determined had no impairment loss been recognised in prior years.

##### *(ii) Available-for-sale financial assets*

At each reporting date, an assessment is made of whether there is any objective evidence of impairment in the value of a financial asset or group of assets.

Impairment losses on available-for-sale debt securities are recognised within "Loan impairment charges" in the income statement and impairment losses on available-for-sale equity securities are recognised within "Gains less losses from financial investments and fixed assets" in the income statement.

##### *Available-for-sale debt securities*

When assessing available-for-sale debt securities for objective evidence of impairment at the reporting date, the Group considers all available evidence, including observable data or information about events specifically relating to the securities which may result in a shortfall in recovery of future cash flows.

A subsequent decline in the fair value of the instrument is recognised in the income statement if, and only if there is objective evidence of impairment as a result of further decreases in the estimated future cash flows of the financial asset. Where there is no further objective evidence of impairment, the decline in the fair value of the financial asset is recognised in other comprehensive income and accumulated separately in equity. If the fair value of a debt security increases in a subsequent period, and the increase can be objectively related to an event occurring after the impairment loss was recognised in the income statement, the impairment loss is reversed through the income statement to the extent of the increase in fair value.

## NOTES TO THE FINANCIAL STATEMENTS *(continued)*

### **3. Principal accounting policies *(continued)***

#### **(k) Impairment of assets *(continued)***

##### *Available-for-sale equity securities*

A significant or prolonged decline in the fair value of the asset below its cost is also objective evidence of impairment. In assessing whether it is significant, the decline in fair value is evaluated against the original cost of the asset at initial recognition. In assessing whether it is prolonged, the decline is evaluated against the period in which the fair value of the asset has been below its original cost at initial recognition.

All subsequent increases in the fair value of the instrument are treated as a revaluation and recognised in other comprehensive income. Subsequent decreases in the fair value of the available-for-sale equity security are recognised in the income statement to the extent that further cumulative impairment losses have been incurred. Subsequent recovery in the fair value of the available-for-sale equity security is recognised in the other comprehensive income and the past impairment loss recognised in the income statement is not reversed.

#### **(l) Subsidiaries and associates**

The Group classifies investments in entities which it controls as subsidiaries. The Group classifies investments in entities over which it has significant influence, and that are not subsidiaries, as associates.

The Group's investments in subsidiaries and associates are stated at cost less any impairment losses. Investment in associates is recognised using the equity method. Under this method, such investments are initially stated at cost, including attributable goodwill, and are adjusted thereafter for the post-acquisition change in the Group's share of net assets less any impairment losses. An impairment loss recognised in prior periods shall be reversed through the income statement if, and only if, there has been a change in the estimates used to determine the recoverable amount of the investment since the last impairment loss was recognised.

#### **(m) Investment properties**

Investment properties are land and/or buildings which are owned or held under a leasehold interest to earn rental income and/or for capital appreciation. Investment properties are stated at fair value with changes in fair value being recognised in the income statement. Fair values are determined by independent professional valuers, primarily on the basis of capitalisation of net incomes with due allowance for outgoings and reversionary income potential. Property interests which are held under operating leases to earn rentals, or for capital appreciation, or both, are classified and accounted for as investment property on a property-by-property basis.

#### **(n) Premises, plant and equipment**

##### *(i) Land and buildings*

The following land and buildings held for own use are stated in the balance sheet at their revalued amount, being their fair value at the date of the revaluation less any subsequent accumulated depreciation and impairment losses:

- leasehold land and buildings where the fair value of the land cannot be reliably separated from the value of the building at inception of the lease and the premises are not clearly held under an operating lease; and
- leasehold land and buildings where the value of the land can be reliably separated from the value of the building at inception of the lease and the term of the lease is not less than 50 years.

Revaluations are performed by professionally qualified valuers, on a market basis, with sufficient regularity to ensure that the net carrying amount does not differ materially from the fair value at the reporting date. Surpluses arising on revaluation are credited firstly to the income statement to the extent of any deficits arising on revaluation previously charged to the income statement in respect of the same land and buildings, and are thereafter taken to other comprehensive income and are accumulated separately in the "Premises revaluation reserve". Deficits arising on revaluation, are firstly set off against any previous revaluation surpluses included in the "Premises revaluation reserve" in respect of the same land and buildings, and are thereafter recognised in the income statement.

## NOTES TO THE FINANCIAL STATEMENTS *(continued)*

### **3. Principal accounting policies *(continued)***

#### **(n) Premises, plant and equipment *(continued)***

Depreciation is calculated to write off the valuation of the land and buildings over their estimated useful lives as follows:

- freehold land is not depreciated;
- leasehold land is depreciated over the unexpired terms of the leases; and
- buildings and improvements thereto are depreciated at the greater of 2% per annum on the straight-line basis or over the unexpired terms of the leases or over the remaining estimated useful lives of the buildings.

On revaluation of the land and buildings, depreciation accumulated during the year will be eliminated. Depreciation charged on revaluation surplus of the land and buildings is transferred from "Premises revaluation reserve" to "Retained profits".

On disposal of the land and buildings, the profit and loss is calculated as the difference between the net sales proceeds and the net carrying amount and recognised in the income statement. Surpluses relating to the land and buildings disposed of included in the "Premises revaluation reserve" are transferred as movements in reserves to "Retained profits".

#### *(ii) Other plant and equipment*

Furniture, plant and equipment, are stated at cost less depreciation calculated on the straight-line basis to write off the assets over their estimated useful lives, which are generally between 3 and 20 years. On disposal, the profit and loss is calculated as the difference between the net sales proceeds and the net carrying amount.

Plant and equipment are subject to review for impairment if there are events or changes in circumstances that indicate that the carrying amount may not be recoverable.

#### *(iii) Interest in leasehold land held for own use under operating lease*

The Government of Hong Kong owns all the land in Hong Kong and permits its use under leasehold arrangements. Similar arrangements exist in mainland China. At inception of the lease,

- where the cost of land is known or can be reliably determined and the term of the lease is less than 50 years, the Group records its interest in leasehold land and land use rights separately as operating leases;
- where the cost of land is known or can be reliably determined and the term of the lease is not less than 50 years, the Group records its interest in leasehold land and land use rights as land and buildings held for own use; or
- where the cost of the land is unknown or cannot be reliably determined, and the leasehold land and land use rights are not clearly held under an operating lease, they are accounted for as land and buildings held for own use.

#### **(o) Goodwill and intangible assets**

##### *(i) Goodwill*

Goodwill arises on business combinations, including the acquisition of subsidiaries or associates when the cost of acquisition exceeds the fair value of the Group's share of the identifiable assets, liabilities and contingent liabilities acquired and is reported in the consolidated balance sheet. If the Group's interest in the fair value of the identifiable assets, liabilities and contingent liabilities of an acquired business is greater than the cost of acquisition, the excess is recognised immediately in the income statement. Goodwill on acquisitions of associates is included in "Interest in associates" and is not tested separately for impairment.

## NOTES TO THE FINANCIAL STATEMENTS *(continued)*

### **3. Principal accounting policies *(continued)***

#### **(o) Goodwill and intangible assets *(continued)***

Goodwill is allocated to cash-generating units ("CGUs") for the purpose of impairment testing, which is undertaken at the lowest level at which goodwill is monitored for internal management purposes. Impairment testing is performed at least annually, and whenever there is an indication that the CGU may be impaired, by comparing the recoverable amount of a CGU with the carrying value of its net assets, including attributable goodwill. The recoverable amount of an asset is the higher of, its fair value less cost to sell, and its value in use. Value in use is the present value of the expected future cash flows from a CGU. If the recoverable amount of the CGU is less than the carrying value, an impairment loss is charged to the income statement. Any write-off in excess of the carrying value of goodwill is limited to the fair value of the individual assets and liabilities of the CGU. Goodwill is stated at cost less any accumulated impairment losses, if any.

At the date of disposal of a business, attributable goodwill is included in the Group's share of net assets in the calculation of the gain or loss on disposal.

#### *(ii) Intangible assets*

Intangible assets include PVIF, acquired software licences and capitalised development costs of computer software programmes.

- The PVIF is stated at a valuation determined at the reporting date by using the methodology as described in note 3(t).
- Computer software acquired is stated at cost less amortisation and impairment allowances. Amortisation of computer software is charged to the income statement over its estimated useful life. Costs incurred in the development phase of a project to produce application software for internal use are capitalised and amortised over the software's estimated useful life, usually five years.

Intangible assets that have an indefinite estimated useful life or are not yet ready for use are tested for impairment annually. Intangible assets that have a finite estimated useful life, except for the PVIF, are stated at cost less amortisation and accumulated impairment losses and are amortised over their estimated useful lives. Estimated useful life is the lower of legal duration and expected economic life. Intangible assets are subject to impairment review if there are events or changes in circumstances that indicate that the carrying amount may not be recoverable.

#### **(p) Income tax**

Income tax for the year comprises current tax and movements in deferred tax assets and liabilities. Income tax is recognised in the income statement except to the extent that it relates to items recognised in other comprehensive income or directly in equity, in which case it is recognised in other comprehensive income or directly in equity, respectively.

Current tax is the expected tax payable on the taxable profits for the year, using tax rates enacted or substantively enacted at the reporting date, and any adjustment to tax payable in respect of previous years. Current tax assets and liabilities are settled on an individual taxable entity basis.

Deferred tax assets and liabilities arise from deductible and taxable temporary differences respectively, being the differences between the carrying amounts of assets and liabilities for financial reporting purpose and their tax bases. Deferred tax assets also arise from unused tax losses and unused tax credits. Deferred tax assets are recognised to the extent that it is probable that taxable profits will be available, against which deductible temporary differences can be utilised at each reporting date.

Deferred tax is calculated using the tax rates that are expected to apply in the periods in which the assets will be realised or the liabilities settled. Deferred tax assets and liabilities are not discounted. Deferred tax assets and liabilities are offset when they arise in the same tax reporting group and relate to income taxes levied by the same taxation authority, and when a legal right to offset exists in the entity.

## NOTES TO THE FINANCIAL STATEMENTS *(continued)*

### 3. Principal accounting policies *(continued)*

#### **(q) Employee benefits**

(i) Salaries, annual bonuses, paid annual leave, leave passage and the cost to the Group of non-monetary benefits are accrued in the year in which the associated services are rendered by the employees. Provision is made in respect of paid leave entitlement accumulated during the year, which can be carried forward into future periods for compensated absence or payment in lieu if the employee leaves employment.

(ii) The Group provides retirement benefits for staff members and operates defined benefit and defined contribution schemes and participates in mandatory provident fund schemes in accordance with the relevant laws and regulations.

Payments to defined contribution plans and state-managed retirement benefit plans, where the Group's obligations under the plans are equivalent to a defined contribution plan, are charged as an expense as they incur.

The costs recognised for funding defined benefit plans are determined using the projected unit credit method, with annual actuarial valuations performed on each plan. The net charge to the income statement mainly comprises the service cost and the net interest on the net defined benefit liability and is presented in operating expenses. Service cost comprises current service cost, past service cost, and gain or loss on settlement.

The net defined benefit asset or liability recognised in the balance sheet represents the difference between the fair value of plan assets and the present value of the defined benefit obligations adjusted for unrecognised past service costs. In the case of a defined benefit asset, it is limited to unrecognised past service costs plus the present value of available refunds and reductions in future contributions to the plan.

#### **(r) Provisions**

Provisions are recognised when it is probable that an outflow of economic benefits will be required to settle a present legal or constructive obligation arising from past events and a reliable estimate can be made as to the amount of the obligation. Contingent liabilities, which include certain guarantees and letters of credit pledged as collateral security, are possible obligations that arise from past events whose existence will be confirmed only by the occurrence, or nonoccurrence, of one or more uncertain future events not wholly within the control of the Group; or are present obligations that have arisen from past events but are not recognised because it is not probable that settlement will require the outflow of economic benefits, or because the amount of the obligations cannot be reliably measured. Contingent liabilities are not recognised in the financial statements but are disclosed unless the probability of settlement is remote.

#### **(s) Financial guarantees**

Financial guarantees are contracts that require the Group to make specified payments to reimburse the holder for a loss it incurs because a specified debtor fails to make payment when due in accordance with the terms of the loans or debt instruments.

Financial guarantee liabilities are initially recognised at their fair value, and the initial fair value is amortised over the life of the financial guarantee. The guarantee liability is subsequently carried at the higher of this amortised amount and the present value of any expected payment (when a payment under the guarantee has become probable). Financial guarantees are included within other liabilities.

#### **(t) Insurance contracts**

Through its insurance subsidiaries, the Group issues contracts to customers that contain insurance risk, financial risk or a combination thereof. A contract under which the Group accepts significant insurance risk from another party, by agreeing to compensate that party on the occurrence of a specified uncertain future event, is classified as an insurance contract. An insurance contract may also transfer financial risk, but is accounted for as an insurance contract if the insurance risk is significant.

## NOTES TO THE FINANCIAL STATEMENTS *(continued)*

### 3. Principal accounting policies *(continued)*

#### **(t) Insurance contracts** *(continued)*

A contract issued by the Group that transfers financial risk, without significant insurance risk, is classified as an investment contract, and is accounted for as a financial instrument. The financial assets held by the Group for the purpose of meeting liabilities under insurance and investment contracts are classified and accounted for based on their classifications as set out in notes 3(g) to 3(i).

Insurance contracts are accounted for as follows:

#### *Net earned insurance premiums*

Premiums for life insurance contracts are accounted for when receivable, except in unit-linked insurance contracts where premiums are accounted for when liabilities are recognised.

Reinsurance premiums, netted by the reinsurers' share of provision for unearned premiums, are accounted for in the same reporting period as the premiums for the direct insurance contracts to which they relate.

#### *Claims and reinsurance recoveries*

Gross insurance claims for life insurance contracts reflect the total cost of all claims arising during the reporting period, including policyholder cash dividend payment upon policy anniversary and payments of maturities, surrenders and death claims. Reinsurance recoveries are accounted for in the same period as the related claims.

#### *Deferred acquisition costs*

The deferred acquisition costs related to insurance contract, such as initial commission, are amortised over the period in which the related revenues are earned.

#### *Present value of in-force long-term insurance business ("PVIF")*

A value is placed on insurance contracts that are classified as long-term insurance business or long-term investment contracts with discretionary participating features ("DPF") and in force at the reporting date. This asset represents the present value of the shareholders' interest in the profits expected to emerge from those insurance contracts written at the reporting date.

The PVIF is determined by discounting future earnings expected to emerge from business currently in force, using appropriate assumptions in assessing factors such as future mortality and morbidity, lapse rates, levels of expenses and a risk discount rate that reflects the risk premium attributable to the respective long-term insurance business. The valuation has also included explicit risk margins for non-economic risks in the projection assumptions, and explicit allowances for financial options and guarantees using stochastic methods. Risk discount rates are set on an active basis with reference to market risk free yields and incorporate the explicit margins and allowances for certain risks and uncertainties in place of implicit adjustments. Movements in the PVIF are included in other operating income on a pre-tax basis. The PVIF is reported under "Intangible assets" in the balance sheet.

#### *Liabilities under insurance contracts*

Liabilities under non-linked life insurance contracts are calculated by each life insurance operation based on local actuarial principles. Some insurance contracts may contain discretionary participation features whereby the policyholder is entitled to additional payments whose amount and/or timing is at the discretion of the issuer. The discretionary element of these contracts is included in "Liabilities under insurance contracts".

Liabilities under unit-linked life insurance contracts are at least equivalent to the surrender or transfer value which is calculated by reference to the value of the relevant underlying funds or indices.

A liability adequacy test is carried out on insurance liabilities to ensure that the carrying amount of the liabilities is sufficient in the light of current estimates of future cash flows. When performing the liability adequacy test, all expected cash flows are discounted and compared with the carrying value of the liability. When a shortfall is identified it is charged immediately to the income statement.

## NOTES TO THE FINANCIAL STATEMENTS *(continued)*

### **3. Principal accounting policies *(continued)***

#### **(u) Investment contracts**

Customer liabilities under linked investment contracts are measured at fair value and reported under "Financial liabilities designated at fair value". The linked financial assets are measured at fair value and the movements in fair value are recognised in the income statement in "Net income from financial instruments designated at fair value". Deposits receivable and amounts withdrawn are accounted for as increases or decreases in the liability recorded in respect of investment contracts.

Investment management fee receivables are recognised in the income statement over the period of the provision of the investment management services, in "Net fee income".

#### **(v) Subordinated liabilities**

Financial liabilities are recognised when the Group enters into the contractual provisions of the arrangements with counterparties, which is generally on trade date, and initially measured at fair value plus, in the case of a financial asset or financial liability not at fair value through profit or loss, transaction costs that are directly attributable to the acquisition or issue of the financial asset or liability.

Subordinated liabilities are measured at amortised cost using the effective interest rate method, and are reported under "Subordinated liabilities", except for those issued for trading or designated at fair value, which are carried at fair value and reported under the "Trading liabilities" and "Financial liabilities designated at fair value" in the balance sheet.

Financial instruments issued are classified as equity when there is no contractual obligation to transfer cash or other financial assets or issue a variable number of own equity instruments.

#### **(w) Translation of foreign currencies**

Foreign currency transactions during the year are translated at the foreign exchange rates ruling at the transaction dates. Monetary assets and liabilities denominated in foreign currencies are translated at the foreign exchange rates ruling at each reporting date. Any resulting exchange differences are recognised in the income statement. Non-monetary assets and liabilities that are measured in terms of historical cost in a foreign currency are translated using the foreign exchange rates ruling at the transaction dates. Non-monetary assets and liabilities denominated in foreign currencies that are stated at fair value are translated using the foreign exchange rates ruling at the dates the fair value was determined.

The results of branches, subsidiaries and associates not reporting in Hong Kong dollars are translated into Hong Kong dollars at the average rates of exchange for the reporting period. Exchange differences arising from the re-translation of opening foreign currency net investments and the related cost of hedging, if any, and exchange differences arising from re-translation of the result for the reporting period from the average rate to the exchange rate ruling at the period-end, are recognised in other comprehensive income and accumulated separately in equity in the foreign exchange reserve.

Exchange differences on a monetary item that is part of a net investment in a foreign operation are recognised in the income statement of separate subsidiary's financial statements. In the consolidated financial statements, these exchange differences are recognised in other comprehensive income and accumulated separately in equity in the foreign exchange reserve. On disposal of a foreign operation, exchange differences relating thereto previously recognised in reserves are recognised in the income statement.

## NOTES TO THE FINANCIAL STATEMENTS *(continued)*

### **3. Principal accounting policies *(continued)***

#### **(x) Operating segments**

The Group's operating segments are determined to be customer group segment because the chief operating decision maker uses customer group information in order to make decisions about allocating resources and assessing performance.

Hong Kong Financial Reporting Standard 8 "Operating Segment" requires segmental disclosure to be based on the way that the Group's chief operating decision maker regards and manages the Group, with the amounts reported for each reportable segment being the measures reported to the Group's chief operating decision maker for the purpose of assessing segmental performance and making decision about operating matters.

#### **(y) Related parties**

For the purposes of these financial statements, parties are considered to be related to the Group if the Group has the ability, directly or indirectly, to control the party or exercise significant influence over the party in making financial and operating decisions, or vice versa, or where the Group and the party are members of the same group. Related parties may be individuals (being members of key management personnel, significant shareholders and/or their close family members) or other entities which are under the significant influence of related parties of the Group or post employment benefit scheme. Key management personnel are those persons having authority and responsibility for planning, directing and controlling the activities of the Group and its holding companies, directly or indirectly, including any directors (whether executive or otherwise) and Executive Committee members of the Group and its holding companies.



NOTES TO THE FINANCIAL STATEMENTS (continued)

4 Interest income/interest expense

(a) Interest income

	2016	2015
Interest income arising from:		
- financial assets that are not at fair value through profit and loss	26,193	26,743
- trading assets	284	313
- financial assets designated at fair value	16	7
	<u>26,493</u>	<u>27,063</u>
of which:		
- interest income from impaired financial assets	60	41

(b) Interest expense

	2016	2015
Interest expense arising from:		
- financial liabilities that are not at fair value through profit and loss	3,069	4,101
- trading liabilities	1,129	1,763
- financial liabilities designated at fair value	41	34
	<u>4,239</u>	<u>5,898</u>
of which:		
- interest expense from debt securities in issue maturing after five years	-	-
- interest expense from customer accounts maturing after five years	-	-
- interest expense from subordinated liabilities	112	156

5 Net fee income

	2016	2015
- securities broking and related services	1,175	1,872
- retail investment funds	1,573	1,763
- insurance	674	472
- account services	464	439
- remittances	481	444
- cards	2,503	2,386
- credit facilities	394	420
- trade services	416	491
- other	362	337
Fee income	8,042	8,624
Fee expense	(2,103)	(1,586)
	<u>5,939</u>	<u>7,038</u>
of which:		
Net fee income, other than amounts included in determining the effective interest rate, arising from financial assets or financial liabilities that are not held for trading nor designated at fair value	2,057	2,501
- fee income	3,813	3,779
- fee expense	(1,756)	(1,278)
Net fee income on trust and other fiduciary activities where the Group holds or invests on behalf of its customers	826	988
- fee income	998	1,149
- fee expense	(172)	(161)

**NOTES TO THE FINANCIAL STATEMENTS** *(continued)*

**6 Net trading income**

	2016	2015
Dealing profits	1,664	2,033
- foreign exchange	1,564	2,100
- interest rate derivatives	(38)	(32)
- debt securities	5	75
- equities and other trading	133	(110)
Net gain/(loss) from hedging activities	21	(3)
- fair value hedges	(398)	(91)
-- net loss on hedged items attributable to the hedged risk	402	88
-- net gain on hedging instruments	17	-
- cash flow hedges		
-- net hedging gain		
	<u>1,685</u>	<u>2,030</u>

**7 Net income/(loss) from financial instruments designated at fair value**

	2016	2015
Net income/(loss) on assets designated at fair value which back insurance and investment contracts	89	(139)
Net change in fair value of other financial instruments designated at fair value	(16)	21
	<u>73</u>	<u>(118)</u>
of which dividend income from:		
- listed investments	172	130
- unlisted investments	-	1
	<u>172</u>	<u>131</u>

**8 Gains less losses from financial investments**

	2016	2015
Net gains from disposal of available-for-sale equity securities	7	-
Net gains from disposal of available-for-sale debt securities	98	16
Gains less losses on disposal of loans and advances	-	-
	<u>105</u>	<u>16</u>

There were no impairment losses or gains less losses on disposal of held-to-maturity debt securities and financial liabilities measured at amortised cost for 2016 and 2015.

**NOTES TO THE FINANCIAL STATEMENTS** *(continued)*

**9 Dividend income**

	<b>2016</b>	2015
Dividend income:		
- listed investments	<b>124</b>	123
- unlisted investments	<b>66</b>	19
	<u><b>190</b></u>	<u>142</u>

**10 Net insurance premium income**

	<b>Non-linked insurance</b>	<b>Linked insurance</b>	<b>Total</b>
<b>2016</b>			
Gross insurance premium income	<b>13,126</b>	<b>4</b>	<b>13,130</b>
Reinsurers' share of gross insurance premium income	<b>(2,071)</b>	<b>-</b>	<b>(2,071)</b>
Net insurance premium income	<u><b>11,055</b></u>	<u><b>4</b></u>	<u><b>11,059</b></u>
	Non-linked insurance	Linked insurance	Total
<b>2015</b>			
Gross insurance premium income	13,120	5	13,125
Reinsurers' share of gross insurance premium income	<u>(3,280)</u>	<u>-</u>	<u>(3,280)</u>
Net insurance premium income	<u><b>9,840</b></u>	<u><b>5</b></u>	<u><b>9,845</b></u>

**11 Other operating income**

	<b>2016</b>	2015
Rental income from investment properties	<b>362</b>	382
Movement in present value of in-force long-term insurance business (note 38(a))	<b>2,233</b>	3,168
Gains less losses on disposal of fixed assets	<b>(13)</b>	(10)
Others	<b>246</b>	363
	<u><b>2,828</b></u>	<u>3,903</u>

NOTES TO THE FINANCIAL STATEMENTS (continued)

12 Net insurance claims and benefits paid and movement in liabilities to policyholders

	Non-linked insurance	Linked insurance	Total
<b>2016</b>			
Claims, benefits and surrenders paid	8,393	7	8,400
Movement in provisions	6,889	(1)	6,888
Gross claims and benefits paid and movement in liabilities to policyholders	15,282	6	15,288
Reinsurers' share of claims, benefits and surrenders paid	(129)	-	(129)
Reinsurers' share of movement in provisions	(1,625)	-	(1,625)
Reinsurers' share of claims and benefits paid and movement in liabilities to policyholders	(1,754)	-	(1,754)
Net insurance claims and benefits paid and movement in liabilities to policyholders	<u>13,528</u>	<u>6</u>	<u>13,534</u>
<b>2015</b>			
Claims, benefits and surrenders paid	7,067	12	7,079
Movement in provisions	8,976	(15)	8,961
Gross claims and benefits paid and movement in liabilities to policyholders	16,043	(3)	16,040
Reinsurers' share of claims, benefits and surrenders paid	(75)	-	(75)
Reinsurers' share of movement in provisions	(2,997)	-	(2,997)
Reinsurers' share of claims and benefits paid and movement in liabilities to policyholders	(3,072)	-	(3,072)
Net insurance claims and benefits paid and movement in liabilities to policyholders	<u>12,971</u>	<u>(3)</u>	<u>12,968</u>

13 Loan impairment charges and other credit risk provisions

	2016	2015
Net charge for impairment of loans and advances to customers (note 31(b)):		
Individually assessed impairment charges:		
- new charges	662	594
- releases	(43)	(50)
- recoveries	(80)	(16)
	<u>539</u>	<u>528</u>
Collectively assessed impairment charges	<u>774</u>	<u>580</u>
Loan impairment charges and other credit risk provisions	<u>1,313</u>	<u>1,108</u>

There was no impairment charge (2015: Nil) provided for available-for-sale debt securities, held-to-maturity debt securities and placings with and advances to banks by the Group.

NOTES TO THE FINANCIAL STATEMENTS (continued)

14 Operating expenses

	2016	2015
Employee compensation and benefits:		
- salaries and other costs*	4,394	4,448
- retirement benefit costs		
-- defined benefit scheme (note 54(a))	219	259
-- defined contribution scheme (note 54(b))	194	186
	4,807	4,893
General and administrative expenses:		
- rental expenses	664	696
- other premises and equipment	1,235	1,201
- marketing and advertising expenses	499	902
- other operating expenses	1,828	1,723
	4,226	4,522
Depreciation of premises, plant and equipment (note 37(a))	1,114	957
Amortisation of intangible assets (note 38(c))	105	110
	10,252	10,482
* of which:		
share-based payments: (note 55(d))	29	38
Cost efficiency ratio	33.5%	33.8%

Included in operating expenses are minimum lease payments under operating leases of HK\$676m (2015: HK\$716m).

15 The emoluments of the five highest paid individuals

(a) The aggregate emoluments

	2016	2015
Salaries, allowances and benefits in kind	28	24
Retirement scheme contributions	2	1
Variable bonuses	23	27
	53	52

(b) The numbers of the five highest paid individuals whose emoluments fell within the following bands were:

HK\$	2016 Number of Individuals	2015 Number of Individuals
5,500,001 - 6,000,000	1	-
6,000,001 - 6,500,000	1	1
7,000,001 - 7,500,000	-	1
8,000,001 - 8,500,000	1	2
11,500,001 - 12,000,000	1	-
20,500,001 - 21,000,000	1	-
21,500,001 - 22,000,000	-	1
	5	5

The emoluments of the five highest paid individuals set out above include the emoluments of three (2015: three) Executive Directors which are included in note 16. There is no Non-executive Director included in the table above (2015: Nil).

NOTES TO THE FINANCIAL STATEMENTS (continued)

16 Directors' emoluments

The emoluments of the Directors of the Bank disclosed pursuant to section 383 of the Hong Kong Companies Ordinance (Cap.622) and the Companies (Disclosure of Information about Benefits of Directors) Regulation were set out below:

	Salaries, allowances and benefits		contribution to retirement benefit schemes <sup>(6)</sup>	Variable bonus <sup>(7)</sup>				Total 2016 '000	Total 2015 '000
	Fees '000	in kind <sup>(8)</sup> '000	'000	Cash		Shares			
				Deferred '000	Non-deferred '000	Deferred '000	Non-deferred '000		
<b>Executive Directors</b>									
Ms Rose Lee, Chief Executive <sup>(1)</sup>	-	10,031	364	3,097	2,065	3,097	2,065	20,719	21,707
Mr Nixon Chan <sup>(4)</sup> (Redesignated as NED on 1 Jul 2016)	-	1,880	9	400	600	400	600	3,889	8,490
Mr Andrew H C Fung <sup>(1)</sup>	-	3,774	278	820	1,230	820	1,230	8,152	8,397
Mr Patrick Chan <sup>(1)</sup> (Appointed on 19 Feb 2016)	-	6,724	311	720	1,080	720	1,080	10,635	-
<b>Non-Executive Directors</b>									
Dr Raymond K F Ch'ien <sup>(3)</sup>	740	-	-	-	-	-	-	740	740
Dr John C C Chan <sup>(3)</sup>	600	-	-	-	-	-	-	600	600
Mr Nixon Chan <sup>(4)</sup>	225	-	-	-	-	-	-	225	-
Ms L Y Chiang <sup>(3)</sup>	510	-	-	-	-	-	-	510	510
Mr Kenneth S Y Ng <sup>(5)</sup>	450	-	-	-	-	-	-	450	450
Dr Fred Zulu Hu <sup>(3)</sup>	610	-	-	-	-	-	-	610	610
Dr Henry K S Cheng <sup>(3)</sup>	450	-	-	-	-	-	-	450	450
Ms Irene Y L Lee <sup>(3)</sup>	870	-	-	-	-	-	-	870	870
Ms Sarah C Legg <sup>(2)</sup>	450	-	-	-	-	-	-	450	450
Dr Eric K C Li <sup>(3)</sup>	870	-	-	-	-	-	-	870	870
Dr Vincent H S Lo	450	-	-	-	-	-	-	450	450
Mr Richard Y S Tang <sup>(3)</sup>	820	-	-	-	-	-	-	820	825
Mr Peter T S Wong <sup>(2)</sup>	510	-	-	-	-	-	-	510	510
Mr Michael W K Wu <sup>(3)</sup>	670	-	-	-	-	-	-	670	670
<b>Past Directors</b>	-	-	2,287	-	-	-	-	2,287	2,252
	<u>8,225</u>	<u>22,409</u>	<u>3,249</u>	<u>5,037</u>	<u>4,975</u>	<u>5,037</u>	<u>4,975</u>	<u>53,907</u>	<u>48,851</u>
2015	<u>8,005</u>	<u>17,743</u>	<u>2,912</u>	<u>4,833</u>	<u>4,695</u>	<u>5,968</u>	<u>4,695</u>		

During the year ended 31 December 2016, there was no termination on the appointment of directors of the Bank and its subsidiaries and thus no payments was made as compensation for the early termination of the appointment and no consideration was provided to third parties for making available directors' services (2015: Nil).

Notes :

- (1) In line with the HSBC Group's remuneration policy, no Director's fees were paid to those Directors who were full time employees of the Bank or its subsidiaries.
- (2) Fees receivable as a Director of Hang Seng Bank Limited were surrendered to The Hongkong and Shanghai Banking Corporation Limited in accordance with the HSBC Group's internal policy.
- (3) Independent Non-Executive Director.
- (4) A sum of HK\$3,889,000 was paid to Mr Nixon Chan for his service as a full time employee of the Bank prior to his retirement on 1 Jul 2016. No Director's fee was paid to Mr Nixon Chan in his capacity as Executive Director for the period from 1 Jan 2016 to 30 Jun 2016 in accordance to the HSBC Group's remuneration policy. Upon his redesignation as Non-Executive Director of the Bank on 1 Jul 2016, a sum of Director's Fee of HK\$225,000 was payable for his service for the period from 1 Jul 2016 to 31 Dec 2016.
- (5) Fees receivable as a Non-Executive Director of the Bank for the period from 1 Jan 2016 to 31 Mar 2016 in a sum of HK\$112,500 was surrendered to The Hongkong and Shanghai Banking Corporation Limited in accordance with the HSBC Group's internal policy. Upon his retirement from HSBC Group on 1 Apr 2016, a sum of HK\$337,500 was payable to Mr Kenneth Ng for his service as a Non-Executive Director for the period from 1 Apr 2016 to 31 Dec 2016.
- (6) The aggregate amount of pensions received by the past Directors of the Bank under the relevant pension schemes amounted to HK\$2.3m in 2016. The Bank made contributions during 2016 into the retirement benefit schemes of which the Bank's Directors are among their members.
- (7) The amount of variable bonus comprises the cash and the estimated purchase cost of the award of HSBC Holdings Restricted Share. The bonus comprises the deferred and non-deferred variable pay, details of which are also set out in the section of "remuneration of director, senior management and key personnel" under "Corporate Governance Report". The details are also set out in note 56.
- (8) Benefits in kind mainly include housing allowances and estimated money value of other non-cash benefits: share options, car, insurance premium etc.

**NOTES TO THE FINANCIAL STATEMENTS** (continued)

**17 Auditors' remuneration**

	2016	2015
Statutory audit services	13	13
Non-statutory audit services and others	9	7
	<u>22</u>	<u>20</u>

**18 Net gain on partial disposal of Industrial Bank**

	2016	2015
Net gain on partial disposal of Industrial Bank		
- realisation of amounts previously recognised in reserve at 1 January	-	14,707
- net loss arising in the year	-	(4,071)
	<u>-</u>	<u>10,636</u>

**19 Net (deficit)/surplus on property revaluation**

	2016	2015
(Deficit)/surplus of revaluation on investment properties	<u>(37)</u>	<u>261</u>

**20 Tax expense**

**(a) Taxation in the consolidated income statement represents:**

	2016	2015
<b>Current tax - provision for Hong Kong profits tax</b>		
Tax for the year	2,653	2,892
Adjustment in respect of prior years	(25)	(56)
	<u>2,628</u>	<u>2,836</u>
<b>Current tax - taxation outside Hong Kong</b>		
Tax for the year	52	50
Adjustment in respect of prior years	(1)	-
	<u>51</u>	<u>50</u>
<b>Deferred tax</b> (note 46(b))		
Origination and reversal of temporary differences	<u>207</u>	<u>108</u>
<b>Total tax expense</b>	<u>2,886</u>	<u>2,994</u>

The current tax provision is based on the estimated assessable profit for 2016, and is determined for the Bank and its subsidiaries operating in the Hong Kong SAR by using the Hong Kong profits tax rate of 16.5 per cent (2015: 16.5 per cent). For subsidiaries and branches operating in other jurisdictions, the appropriate tax rates prevailing in the relevant countries are used. Deferred tax is calculated at the tax rates that are expected to apply in the period when the liability is settled or the asset is realised.

## NOTES TO THE FINANCIAL STATEMENTS (continued)

### 20 Tax expense (continued)

#### (b) Reconciliation between taxation charge and accounting profit at applicable tax rates:

	2016	2015
Profit before tax	<u>19,090</u>	<u>30,488</u>
Notional tax on profit before tax, calculated at Hong Kong tax rate of 16.5% (2015: 16.5%)	3,150	5,031
Tax effect of:		
- different tax rates in other countries/areas	15	2
- non-taxable income and non-deductible expenses *	(268)	(2,004)
- share of results of associates	(15)	(25)
- others	4	(10)
Actual charge for taxation	<u>2,886</u>	<u>2,994</u>

\* There was a gain on partial disposal of the ordinary shares of Industrial Bank in 2015.

### 21 Earnings per share - basic and diluted

The calculation of basic and diluted earnings per share in 2016 is based on earnings of HK\$15,866m (2015: HK\$27,184m) which is after the deduction of the coupon paid on AT1 capital instrument of HK\$346m (2015: HK\$310m) and on the weighted average number of ordinary shares in issue of 1,911,842,736 shares (unchanged from 2015).

### 22 Dividends per share

#### (a) Dividends attributable to the year:

	2016		2015	
	per share HK\$	HK\$m	per share HK\$	HK\$m
First interim	1.10	2,103	1.10	2,103
Second interim	1.10	2,103	1.10	2,103
Third interim	1.10	2,103	1.10	2,103
Fourth interim	2.80	5,353	2.40	4,588
	<u>6.10</u>	<u>11,662</u>	<u>5.70</u>	<u>10,897</u>
Special interim dividend	-	-	3.00	5,736
	<u>6.10</u>	<u>11,662</u>	<u>8.70</u>	<u>16,633</u>

The fourth interim dividend and the special interim dividend are proposed after the balance sheet date, and have not been recognised as a liability at the balance sheet date.

#### (b) Dividends attributable to the previous year, approved and paid during the year:

	2016	2015
Fourth interim dividend and special interim dividend in respect of the previous year, approved and paid during the year, of HK\$5.4 per share (2015: HK\$2.30 per share)	<u>10,324</u>	<u>4,397</u>

#### (c) Distribution to holder of AT1 capital instrument classified as equity

	2016	2015
Coupon paid on AT1 capital instrument	<u>346</u>	<u>310</u>



## NOTES TO THE FINANCIAL STATEMENTS (continued)

### 23 Segmental analysis

Hong Kong Financial Reporting Standard 8 ('HKFRS 8') requires segmental disclosure to be based on the way that the Group's chief operating decision maker regards and manages the Group, with the amounts reported for each reportable segment being the measures reported to the Group's chief operating decision maker for the purpose of assessing segmental performance and making decisions about operating matters. To align with the internal reporting information, the Group has presented the following four reportable segments.

- **Retail Banking and Wealth Management** offers a broad range of products and services to meet the personal banking, consumer lending and wealth management needs of individual customers. Personal banking products typically include current and savings accounts, mortgages and personal loans, credit cards, insurance and wealth management;
- **Commercial Banking** offers a comprehensive suite of products and services to corporate, commercial and SME customers – including corporate lending, trade and receivable finance, payments and cash management, treasury and foreign exchange, general insurance, key-person insurance, investment services and corporate wealth management;
- **Global Banking and Markets** provides tailored financial solutions to major corporate and institutional clients. Undertaking a long-term relationships management approach, its services include general banking, corporate lending, interest rates, foreign exchange, money markets, structured products and derivatives, etc. Global Banking and Markets also manages the funding and liquidity positions of the Bank and other market risk positions arising from banking activities;
- **Other** mainly represents the Bank's holdings of premises, investment properties, equity shares and subordinated debt funding as well as central support and functional costs with associated recoveries.

#### (a) Segmental result

For the purpose of segmental analysis, the allocation of revenue reflects the benefits of capital and other funding resources allocated to the business segments by way of internal capital allocation and fund transfer-pricing mechanisms. Cost allocation is based on the direct costs incurred by the respective business segments and apportionment of management overheads. Bank-owned premises are reported under the 'Other' segment. When these premises are utilised by Global Businesses, notional rent will be charged to the relevant business segments with reference to market rates.

NOTES TO THE FINANCIAL STATEMENTS (continued)

23 Segmental analysis (continued)

(a) Segmental result (continued)

	Retail Banking and Wealth Management	Commercial Banking	Global Banking and Markets	Other	Total
<b>2016</b>					
Net interest income	12,195	6,132	3,993	(66)	22,254
Net fee income	3,798	1,662	292	187	5,939
Net trading (loss)/income	(46)	251	1,394	86	1,685
Net income/(loss) from financial instruments designated at fair value	94	(6)	(4)	(11)	73
Gains less losses from financial investments	65	-	33	7	105
Dividend income	1	-	-	189	190
Net insurance premium income	10,458	601	-	-	11,059
Other operating income	2,348	185	7	288	2,828
<b>Total operating income</b>	<b>28,913</b>	<b>8,825</b>	<b>5,715</b>	<b>680</b>	<b>44,133</b>
Net insurance claims and benefits paid and movement in liabilities to policyholders	(13,049)	(485)	-	-	(13,534)
<b>Net operating income before loan impairment charges and other credit risk provisions</b>	<b>15,864</b>	<b>8,340</b>	<b>5,715</b>	<b>680</b>	<b>30,599</b>
Loan impairment (charges)/releases and other credit risk provisions	(733)	(590)	10	-	(1,313)
<b>Net operating income</b>	<b>15,131</b>	<b>7,750</b>	<b>5,725</b>	<b>680</b>	<b>29,286</b>
Operating expenses*	(6,357)	(2,471)	(909)	(515)	(10,252)
<b>Operating profit</b>	<b>8,774</b>	<b>5,279</b>	<b>4,816</b>	<b>165</b>	<b>19,034</b>
Net deficit on property revaluation	-	-	-	(37)	(37)
Share of profits from associates	93	-	-	-	93
<b>Profit before tax</b>	<b>8,867</b>	<b>5,279</b>	<b>4,816</b>	<b>128</b>	<b>19,090</b>
Share of profit before tax	46.4%	27.7%	25.2%	0.7%	100.0%
Operating profit excluding loan impairment charges and other credit risk provisions	9,507	5,869	4,806	165	20,347
* Depreciation/amortisation included in operating expenses	(28)	(5)	(2)	(1,184)	(1,219)
<b>At 31 December 2016</b>					
Total assets	411,949	305,914	586,740	72,639	1,377,242
Total liabilities	798,473	254,521	161,387	22,175	1,236,556
Interest in associates	2,274	-	-	-	2,274
Non-current assets acquired during the year	189	11	1	698	899

NOTES TO THE FINANCIAL STATEMENTS (continued)

23 Segmental analysis (continued)

(a) Segmental result (continued)

	Retail Banking and Wealth Management	Commercial Banking	Global Banking and Markets	Other	Total
<b>2015</b>					
Net interest income	11,281	5,929	3,498	457	21,165
Net fee income	4,864	1,672	320	182	7,038
Net trading income/(loss)	72	410	1,576	(28)	2,030
Net (loss)/income from financial instruments designated at fair value	(132)	(8)	-	22	(118)
Gains less losses from financial investments	11	-	5	-	16
Dividend income	1	-	-	141	142
Net insurance premium income	9,366	479	-	-	9,845
Other operating income	3,459	127	17	300	3,903
<b>Total operating income</b>	<b>28,922</b>	<b>8,609</b>	<b>5,416</b>	<b>1,074</b>	<b>44,021</b>
Net insurance claims and benefits paid and movement in liabilities to policyholders	(12,575)	(393)	-	-	(12,968)
<b>Net operating income before loan impairment charges and other credit risk provisions</b>	<b>16,347</b>	<b>8,216</b>	<b>5,416</b>	<b>1,074</b>	<b>31,053</b>
Loan impairment (charges)/releases and other credit risk provisions	(620)	(524)	36	-	(1,108)
<b>Net operating income</b>	<b>15,727</b>	<b>7,692</b>	<b>5,452</b>	<b>1,074</b>	<b>29,945</b>
Operating expenses*	(6,623)	(2,481)	(946)	(432)	(10,482)
Impairment loss on intangible assets	(5)	-	-	(19)	(24)
<b>Operating profit</b>	<b>9,099</b>	<b>5,211</b>	<b>4,506</b>	<b>623</b>	<b>19,439</b>
Net gain on partial disposal of Industrial Bank	-	-	-	10,636	10,636
Net surplus on property revaluation	-	-	-	261	261
Share of profits from associates	151	1	-	-	152
<b>Profit before tax</b>	<b>9,250</b>	<b>5,212</b>	<b>4,506</b>	<b>11,520</b>	<b>30,488</b>
Share of profit before tax	<u>30.3%</u>	<u>17.1%</u>	<u>14.8%</u>	<u>37.8%</u>	<u>100.0%</u>
Share of profit before tax (excluding the gain on partial disposal of Industrial Bank)	<u>46.6%</u>	<u>26.3%</u>	<u>22.7%</u>	<u>4.4%</u>	<u>100.0%</u>
Operating profit excluding loan impairment charges and other credit risk provisions	9,719	5,735	4,470	623	20,547
* Depreciation/amortisation included in operating expenses	(57)	(27)	(6)	(977)	(1,067)
<b>At 31 December 2015</b>					
Total assets	<u>392,667</u>	<u>302,086</u>	<u>571,178</u>	<u>68,498</u>	<u>1,334,429</u>
Total liabilities	<u>753,208</u>	<u>253,626</u>	<u>167,178</u>	<u>18,436</u>	<u>1,192,448</u>
Interest in associates	<u>2,261</u>	<u>14</u>	<u>-</u>	<u>-</u>	<u>2,275</u>
Non-current assets acquired during the year	<u>1,090</u>	<u>43</u>	<u>4</u>	<u>355</u>	<u>1,492</u>

NOTES TO THE FINANCIAL STATEMENTS (continued)

23 Segmental analysis (continued)

(b) Geographic Information

The geographical regions in this analysis are classified by the location of the principal operations of the subsidiary companies or, in the case of the Bank itself, by the location of the branches responsible for reporting the results or advancing the funds. Consolidation adjustments made in preparing the Group's financial statements upon consolidation are included in the "Inter-segment elimination".

	Hong Kong	Mainland China	Others	Inter- segment elimination	Total
<b>Year ended 31 December 2016</b>					
<b>Income and expense</b>					
Total operating income	41,849	2,097	266	(79)	44,133
Profit before tax	18,640	277	173	-	19,090
<b>At 31 December 2016</b>					
Total assets	1,292,392	102,552	20,063	(37,765)	1,377,242
Total liabilities	1,154,324	91,171	19,301	(28,240)	1,236,556
Equity	138,068	11,381	762	(9,525)	140,686
Share capital	9,658	9,669	-	(9,669)	9,658
Interest in associates	2,273	1	-	-	2,274
Non-current assets*	50,170	987	18	-	51,175
Contingent liabilities and commitments	351,252	43,156	5,752	-	400,160
<b>Year ended 31 December 2015</b>					
<b>Income and expense</b>					
Total operating income	41,806	2,058	249	(92)	44,021
Profit before tax	30,224	101	163	-	30,488
<b>At 31 December 2015</b>					
Total assets	1,244,606	113,718	19,260	(43,155)	1,334,429
Total liabilities	1,105,668	101,806	18,655	(33,681)	1,192,448
Equity	138,938	11,912	605	(9,474)	141,981
Share capital	9,658	10,093	-	(10,093)	9,658
Interest in associates	2,272	3	-	-	2,275
Non-current assets*	47,414	1,046	22	-	48,482
Contingent liabilities and commitments	334,682	38,545	5,645	-	378,872

\* Non-current assets consist of properties, plant and equipment, goodwill and other intangible assets.

NOTES TO THE FINANCIAL STATEMENTS (continued)

24 Analysis of assets and liabilities by remaining maturity

The maturity analysis is based on the remaining contractual maturity at the balance sheet date, with the exception of the trading portfolio that may be sold before maturity and is accordingly recorded as "Trading".

	Repayable on demand	One month or less but not on demand	Over one month but within three months	Over three months but within one year	Over one year but within five years	Over five years	Trading	No contractual maturity	Total
<b>2016</b>									
<b>Assets</b>									
Cash and sight balances									
at central banks	23,299	-	-	-	-	-	-	-	23,299
Placings with and advances to banks	11,497	32,358	55,459	1,855	1,277	1,014	-	-	103,460
Trading assets	-	-	-	-	-	-	44,427	-	44,427
Financial assets									
designated at fair value	-	-	-	-	15	354	-	8,154	8,523
Derivative financial instruments	-	1	60	645	1,130	12	14,847	-	16,695
Loans and advances to customers	14,372	62,153	51,881	125,415	244,106	201,065	-	-	698,992
Financial investments:									
- available-for-sale investments	-	36,885	100,785	81,932	82,537	4,797	-	4,301	311,237
- held-to-maturity debt securities	-	637	2,015	5,439	30,810	47,999	-	-	86,900
	<u>49,168</u>	<u>132,034</u>	<u>210,200</u>	<u>215,286</u>	<u>359,875</u>	<u>255,241</u>	<u>59,274</u>	<u>12,455</u>	<u>1,293,533</u>
Interest in associates									2,274
Investment properties									9,960
Premises, plant and equipment									26,772
Intangible assets									14,443
Other assets									30,260
									<u>1,377,242</u>
<b>Liabilities</b>									
Current, savings and									
other deposit accounts	790,304	82,681	77,259	37,648	1,647	-	-	-	989,539
Repurchase agreements - non trading	-	1,805	-	-	-	-	-	-	1,805
Deposits from banks	1,477	11,481	1,117	-	-	-	-	-	14,075
Trading liabilities	-	-	-	-	-	-	68,124	-	68,124
Financial liabilities									
designated at fair value	3	-	-	3,002	482	504	-	-	3,991
Derivative financial instruments	-	-	13	142	426	2	12,720	-	13,303
Certificates of deposit									
and other debt securities in issue:									
- certificates of deposit in issue	-	-	-	4,000	-	-	-	-	4,000
- other debt securities in issue	-	-	-	1,116	-	-	-	-	1,116
Subordinated liabilities	-	-	-	-	-	2,327	-	-	2,327
	<u>791,784</u>	<u>95,967</u>	<u>78,389</u>	<u>45,908</u>	<u>2,555</u>	<u>2,833</u>	<u>80,844</u>	<u>-</u>	<u>1,098,280</u>
Other liabilities									24,765
Liabilities under insurance contracts									108,326
Current tax liabilities									25
Deferred tax liabilities									5,160
									<u>1,236,556</u>

NOTES TO THE FINANCIAL STATEMENTS (continued)

24 Analysis of assets and liabilities by remaining maturity (continued)

	Repayable on demand	One month or less but not on demand	Over one month but within three months	Over three months but within one year	Over one year but within five years	Over five years	Trading	No contractual maturity	Total
<b>2016</b>									
of which:									
Certificates of deposit included in:									
- trading assets	-	-	-	-	-	-	-	-	-
- financial assets									
designated at fair value	-	-	-	-	-	-	-	-	-
- available-for-sale investments	-	334	1,044	3,100	842	-	-	-	5,320
- held-to-maturity debt securities	-	-	8	569	2,033	1,280	-	-	3,890
	<u>-</u>	<u>334</u>	<u>1,052</u>	<u>3,669</u>	<u>2,875</u>	<u>1,280</u>	<u>-</u>	<u>-</u>	<u>9,210</u>
Debt securities included in:									
- trading assets	-	-	-	-	-	-	38,613	-	38,613
- financial assets									
designated at fair value	-	-	-	-	15	354	-	-	369
- available-for-sale investments	-	36,551	99,741	78,832	81,695	4,797	-	-	301,616
- held-to-maturity debt securities	-	637	2,007	4,870	28,777	46,719	-	-	83,010
	<u>-</u>	<u>37,188</u>	<u>101,748</u>	<u>83,702</u>	<u>110,487</u>	<u>51,870</u>	<u>38,613</u>	<u>-</u>	<u>423,608</u>
Certificates of deposit in issue included in:									
- trading liabilities	-	-	-	-	-	-	-	-	-
- financial liabilities									
designated at fair value	-	-	-	3,002	482	-	-	-	3,484
- issue at amortised cost	-	-	-	4,000	-	-	-	-	4,000
	<u>-</u>	<u>-</u>	<u>-</u>	<u>7,002</u>	<u>482</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>7,484</u>

NOTES TO THE FINANCIAL STATEMENTS (continued)

24 Analysis of assets and liabilities by remaining maturity (continued)

	Repayable on demand	One month or less but not on demand	Over one month but within three months	Over three months but within one year	Over one year but within five years	Over five years	Trading	No contractual maturity	Total
2015									
<b>Assets</b>									
Cash and sight balances									
at central banks	10,118	-	-	-	-	-	-	-	10,118
Placings with and advances to banks	15,443	54,166	49,749	2,433	-	2,199	-	-	123,990
Trading assets	-	-	-	-	-	-	40,373	-	40,373
Financial assets									
designated at fair value	-	1,074	2	-	9	51	-	6,767	7,903
Derivative financial instruments	-	-	133	122	228	9	11,103	-	11,595
Loans and advances to customers	12,676	53,121	56,340	132,745	238,447	195,617	-	-	688,946
Financial investments:									
- available-for-sale investments	-	35,639	84,573	103,763	56,219	5,591	-	4,665	290,450
- held-to-maturity debt securities	-	78	1,631	4,424	31,006	44,683	-	-	81,822
	<u>38,237</u>	<u>144,078</u>	<u>192,428</u>	<u>243,487</u>	<u>325,909</u>	<u>248,150</u>	<u>51,476</u>	<u>11,432</u>	<u>1,255,197</u>
Interest in associates									2,275
Investment properties									10,075
Premises, plant and equipment									26,186
Intangible assets									12,221
Other assets									28,475
									<u>1,334,429</u>
<b>Liabilities</b>									
Current, savings and									
other deposit accounts	704,866	130,724	85,748	36,786	1,104	-	-	-	959,228
Repurchase agreements - non trading	-	2,315	-	-	-	-	-	-	2,315
Deposits from banks	6,654	12,103	23	-	-	-	-	-	18,780
Trading liabilities	-	-	-	-	-	-	62,917	-	62,917
Financial liabilities									
designated at fair value	2	-	-	-	3,491	501	-	-	3,994
Derivative financial instruments	-	5	21	64	469	33	9,396	-	9,988
Certificates of deposit									
and other debt securities in issue:									
- certificates of deposit in issue	-	-	-	-	4,000	-	-	-	4,000
- other debt securities in issue	-	-	-	-	1,191	-	-	-	1,191
Subordinated liabilities	-	-	-	-	-	2,325	-	-	2,325
	<u>711,522</u>	<u>145,147</u>	<u>85,792</u>	<u>36,850</u>	<u>10,255</u>	<u>2,859</u>	<u>72,313</u>	<u>-</u>	<u>1,064,738</u>
Other liabilities									20,891
Liabilities under insurance contracts									101,817
Current tax liabilities									185
Deferred tax liabilities									4,817
									<u>1,192,448</u>

NOTES TO THE FINANCIAL STATEMENTS (continued)

24 Analysis of assets and liabilities by remaining maturity (continued)

	Repayable on demand	One month or less but not on demand	Over one month but within three months	Over three months but within one year	Over one year but within five years	Over five years	Trading	No contractual maturity	Total
2015									
of which:									
Certificates of deposit included in:									
- trading assets	-	-	-	-	-	-	-	-	-
- financial assets designated at fair value	-	-	-	-	-	-	-	-	-
- available-for-sale investments	-	282	1,511	4,045	681	-	-	-	6,519
- held-to-maturity debt securities	-	-	814	832	2,309	1,579	-	-	5,534
	<u>-</u>	<u>282</u>	<u>2,325</u>	<u>4,877</u>	<u>2,990</u>	<u>1,579</u>	<u>-</u>	<u>-</u>	<u>12,053</u>
Debt securities included in:									
- trading assets	-	-	-	-	-	-	38,080	-	38,080
- financial assets designated at fair value	-	1,074	2	-	9	51	-	-	1,136
- available-for-sale investments	-	35,357	83,062	99,718	55,538	5,591	-	23	279,289
- held-to-maturity debt securities	-	78	817	3,592	28,697	43,104	-	-	76,288
	<u>-</u>	<u>36,509</u>	<u>83,881</u>	<u>103,310</u>	<u>84,244</u>	<u>48,746</u>	<u>38,080</u>	<u>23</u>	<u>394,793</u>
Certificates of deposit in issue included in:									
- trading liabilities	-	-	-	-	-	-	-	-	-
- financial liabilities designated at fair value	-	-	-	-	3,491	-	-	-	3,491
- issue at amortised cost	-	-	-	-	4,000	-	-	-	4,000
	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>7,491</u>	<u>-</u>	<u>-</u>	<u>-</u>	<u>7,491</u>



NOTES TO THE FINANCIAL STATEMENTS (continued)

25 Accounting classifications

The tables below set out the Group's classification of financial assets and liabilities:

	Trading	Designated at fair value	Available- for-sale/ hedging	Held-to- maturity	Loans and receivables	Other amortised cost	Total
<b>2016</b>							
Cash and sight balances at central banks	-	-	-	-	15,681	7,618	23,299
Placings with and advances to banks	-	-	-	-	103,460	-	103,460
Derivative financial instruments	14,847	1	1,847	-	-	-	16,695
Loans and advances to customers	-	-	-	-	698,992	-	698,992
Investment securities	38,629	8,523	311,237	86,900	-	-	445,289
Acceptances and endorsements	-	-	-	-	5,292	-	5,292
Other financial assets	5,798	-	-	-	12,573	-	18,371
Total financial assets	<u>59,274</u>	<u>8,524</u>	<u>313,084</u>	<u>86,900</u>	<u>835,998</u>	<u>7,618</u>	<u>1,311,398</u>
Non-financial assets	-	-	-	-	-	-	65,844
<b>Total assets</b>							<u><u>1,377,242</u></u>

Current, savings and other deposit accounts	26,090	-	-	-	-	989,539	1,015,629
Repurchase agreements – non-trading	-	-	-	-	-	1,805	1,805
Deposits from banks	-	-	-	-	-	14,075	14,075
Derivative financial instruments	12,720	8	575	-	-	-	13,303
Certificates of deposit and other debt securities in issue	5,026	3,484	-	-	-	5,116	13,626
Other financial liabilities	37,008	-	-	-	-	17,520	54,528
Subordinated liabilities	-	-	-	-	-	2,327	2,327
Liabilities to customers under investment contracts	-	507	-	-	-	-	507
Acceptances and endorsements	-	-	-	-	-	5,292	5,292
Total financial liabilities	<u>80,844</u>	<u>3,999</u>	<u>575</u>	<u>-</u>	<u>-</u>	<u>1,035,674</u>	<u>1,121,092</u>
Non-financial liabilities	-	-	-	-	-	-	115,464
<b>Total liabilities</b>							<u><u>1,236,556</u></u>

2015

Cash and sight balances at central banks	-	-	-	-	4,859	5,259	10,118
Placings with and advances to banks	-	-	-	-	123,990	-	123,990
Derivative financial instruments	11,103	20	472	-	-	-	11,595
Loans and advances to customers	-	-	-	-	688,946	-	688,946
Investment securities	38,101	7,903	290,450	81,822	-	-	418,276
Acceptances and endorsements	-	-	-	-	5,724	-	5,724
Other financial assets	2,272	-	-	-	13,152	-	15,424
Total financial assets	<u>51,476</u>	<u>7,923</u>	<u>290,922</u>	<u>81,822</u>	<u>836,671</u>	<u>5,259</u>	<u>1,274,073</u>
Non-financial assets	-	-	-	-	-	-	60,356
<b>Total assets</b>							<u><u>1,334,429</u></u>

Current, savings and other deposit accounts	27,440	-	-	-	-	959,228	986,668
Repurchase agreements – non-trading	-	-	-	-	-	2,315	2,315
Deposits from banks	-	-	-	-	-	18,780	18,780
Derivative financial instruments	9,396	-	592	-	-	-	9,988
Certificates of deposit and other debt securities in issue	2,351	3,491	-	-	-	5,191	11,033
Other financial liabilities	33,126	-	-	-	-	13,086	46,212
Subordinated liabilities	-	-	-	-	-	2,325	2,325
Liabilities to customers under investment contracts	-	503	-	-	-	-	503
Acceptances and endorsements	-	-	-	-	-	5,724	5,724
Total financial liabilities	<u>72,313</u>	<u>3,994</u>	<u>592</u>	<u>-</u>	<u>-</u>	<u>1,006,649</u>	<u>1,083,548</u>
Non-financial liabilities	-	-	-	-	-	-	108,900
<b>Total liabilities</b>							<u><u>1,192,448</u></u>

NOTES TO THE FINANCIAL STATEMENTS (continued)

26 Cash and sight balances at central banks

	2016	2015
Cash in hand	7,618	5,259
Sight balances at central banks	<u>15,681</u>	<u>4,859</u>
	<u><b>23,299</b></u>	<u>10,118</u>

27 Placings with and advances to banks

	2016	2015
Balances with banks	7,456	13,446
Placings with and advances to banks maturing within one month	36,399	56,163
Placings with and advances to banks maturing after one month but less than one year	57,314	52,182
Placings with and advances to banks maturing after one year	<u>2,291</u>	<u>2,199</u>
	<u><b>103,460</b></u>	<u>123,990</u>

of which:

Placings with and advances to central banks	10,785	10,305
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There were no overdue advances, impaired advances and rescheduled advances to banks at 31 December 2016 (2015: Nil).

28 Trading assets

	2016	2015
Treasury bills	27,733	21,405
Other debt securities	<u>10,880</u>	<u>16,675</u>
Debt securities	<u><b>38,613</b></u>	<u>38,080</u>
Investment funds	<u>16</u>	<u>21</u>
<b>Total trading securities</b>	<u><b>38,629</b></u>	<u>38,101</u>
Other*	<u>5,798</u>	<u>2,272</u>
<b>Total trading assets</b>	<u><b>44,427</b></u>	<u>40,373</u>

\* This represents amount receivable from counterparties on trading transactions not yet settled.

	2016		2015	
	Debt securities	Investment funds	Debt securities	Investment funds
Issued by public bodies:				
- central governments and central banks	<u>38,569</u>	-	<u>35,386</u>	-
- other public sector entities	<u>-</u>	-	<u>-</u>	-
	<u><b>38,569</b></u>	-	<u>35,386</u>	-
Issued by other bodies:				
- banks	<u>44</u>	-	<u>768</u>	-
- corporate entities	<u>-</u>	<u>16</u>	<u>1,926</u>	<u>21</u>
	<u><b>44</b></u>	<u><b>16</b></u>	<u>2,694</u>	<u>21</u>
	<u><b>38,613</b></u>	<u><b>16</b></u>	<u>38,080</u>	<u>21</u>
- listed	<u>10,880</u>	<u>16</u>	<u>14,027</u>	<u>21</u>
- unlisted	<u>27,733</u>	<u>-</u>	<u>24,053</u>	<u>-</u>
	<u><b>38,613</b></u>	<u><b>16</b></u>	<u>38,080</u>	<u>21</u>

NOTES TO THE FINANCIAL STATEMENTS (continued)

29 Financial assets designated at fair value

	2016	2015
Treasury bills	-	1,070
Other debt securities	<b>369</b>	66
Debt securities	<b>369</b>	1,136
Equity shares	<b>4,648</b>	1,838
Investment funds	<b>3,506</b>	4,929
	<b>8,523</b>	7,903

	2016			2015		
	Debt securities	Equity shares	Investment funds	Debt securities	Equity shares	Investment funds
Issued by public bodies:						
- central governments and central banks	-	-	-	1,070	-	-
- other public sector entities	<b>1</b>	<b>91</b>	-	1	6	-
	<b>1</b>	<b>91</b>	-	1,071	6	-
Issued by other bodies:						
- banks	<b>158</b>	<b>671</b>	-	6	423	-
- corporate entities	<b>210</b>	<b>3,886</b>	<b>3,506</b>	59	1,409	4,929
	<b>368</b>	<b>4,557</b>	<b>3,506</b>	65	1,832	4,929
	<b>369</b>	<b>4,648</b>	<b>3,506</b>	1,136	1,838	4,929
- listed	<b>24</b>	<b>4,469</b>	<b>873</b>	66	1,795	282
- unlisted	<b>345</b>	<b>179</b>	<b>2,633</b>	1,070	43	4,647
	<b>369</b>	<b>4,648</b>	<b>3,506</b>	1,136	1,838	4,929

## NOTES TO THE FINANCIAL STATEMENTS *(continued)*

### **30 Derivative financial instruments**

Derivatives are financial contracts whose values and characteristics are derived from underlying assets, currency rates and interest rates, and indices. Derivative instruments are subject to both credit risk and market risk. The credit risk relating to a derivative contract is principally the replacement cost of the contract when it has a positive mark-to-market value and the estimated potential future change in value over the residual maturity of the contract. The nominal value of the contracts does not represent the amount of the Group's exposure to credit risk. All activities relating to derivatives are subject to the same credit approval and monitoring standards used to control credit risk for other transactions. Market risk from derivative positions is controlled individually and in combination with on-balance sheet market risk positions within the Group's market risk limits regime as described in the Management Discussion and Analysis.

The Group transacts derivatives for three primary purposes: to create risk management solutions for clients, for proprietary trading purposes, and to manage and hedge its own risks. For accounting purposes, derivative financial instruments are held for trading, or financial instruments designated at fair value, or designated as either fair value hedge or cash flow hedge. The Group primarily traded over-the-counter derivatives and also participated in exchange traded derivatives.

NOTES TO THE FINANCIAL STATEMENTS (continued)

30 Derivative financial instruments (continued)

The following table shows the nominal contract amounts and marked-to-market value of assets and liabilities by each class of derivatives.

	2016			2015		
	Contract amounts	Derivative assets	Derivative liabilities	Contract amounts	Derivative assets	Derivative liabilities
<b>Derivatives held for trading</b>						
Exchange rate contracts:						
- spot and forward foreign exchange	696,015	8,392	6,238	623,963	5,572	4,066
- currency swaps	92,633	3,648	3,680	62,549	1,516	1,399
- currency options purchased	34,618	1,062	-	68,008	2,787	-
- currency options written	34,274	-	1,065	64,812	-	2,808
	<u>857,540</u>	<u>13,102</u>	<u>10,983</u>	<u>819,332</u>	<u>9,875</u>	<u>8,273</u>
Interest rate contracts:						
- interest rate swaps	239,713	1,383	1,478	207,984	873	867
- interest rate options written	6,713	-	-	4,482	-	-
- other interest rate contracts	858	4	1	948	2	-
	<u>247,284</u>	<u>1,387</u>	<u>1,479</u>	<u>213,414</u>	<u>875</u>	<u>867</u>
Equity and other contracts:						
- equity swaps	5,689	6	199	2,687	2	92
- equity options purchased	13,947	337	-	11,599	351	-
- equity options written	8,719	-	58	9,204	-	162
- credit derivatives	634	4	-	-	-	-
- other contracts	491	11	1	411	-	2
	<u>29,480</u>	<u>358</u>	<u>258</u>	<u>23,901</u>	<u>353</u>	<u>256</u>
Total derivatives held for trading	<u>1,134,304</u>	<u>14,847</u>	<u>12,720</u>	<u>1,056,647</u>	<u>11,103</u>	<u>9,396</u>
<b>Derivatives managed in conjunction with financial assets designated at fair value</b>						
Interest rate contracts:						
- interest rate swaps	<u>3,500</u>	<u>1</u>	<u>8</u>	<u>3,500</u>	<u>20</u>	<u>-</u>
<b>Cash flow hedge derivatives</b>						
Exchange rate contracts:						
- currency swaps	27,151	1,511	181	15,359	388	163
Interest rate contracts:						
- interest rate swaps	13,341	-	51	28,259	44	10
	<u>40,492</u>	<u>1,511</u>	<u>232</u>	<u>43,618</u>	<u>432</u>	<u>173</u>
<b>Fair value hedge derivatives</b>						
Interest rate contracts:						
- interest rate swaps	<u>46,296</u>	<u>336</u>	<u>343</u>	<u>29,381</u>	<u>40</u>	<u>419</u>
<b>Total derivatives</b>	<u>1,224,592</u>	<u>16,695</u>	<u>13,303</u>	<u>1,133,146</u>	<u>11,595</u>	<u>9,988</u>

## NOTES TO THE FINANCIAL STATEMENTS (continued)

### 30 Derivative financial instruments (continued)

#### Trading derivatives

Most of the Group's trading derivative transactions relate to sales and trading activities. Sales activities include the structuring and marketing of derivative products to customers to enable them to take, transfer, modify or reduce current or expected risks. Trading activities in derivatives are entered into principally for the purpose of generating profits from short-term fluctuations in price or margin. Positions may be traded actively or be held over a period of time to benefit from expected changes in currency rates, interest rates, equity prices or other market parameters.

Derivatives classified as held for trading include non-qualifying hedging derivatives and ineffective hedging derivatives. Non-qualifying hedging derivatives are entered into for risk management purposes but do not meet the criteria for hedge accounting. These include derivatives managed in conjunction with financial instruments designated at fair value. Ineffective hedging derivatives were previously designated as hedges, but no longer meet the criteria for hedge accounting.

#### Hedging instruments

The Group uses derivatives (principally interest rate and currency swaps) for hedging purposes in the management of its own asset and liability portfolios and structural positions. This enables the Group to optimise the cost of managing the balance sheet, and to mitigate the market risk which would otherwise arise from structural imbalances in the maturity and other profiles of its assets and liabilities.

#### (a) Fair value hedge

The Group's fair value hedge principally consists of interest rate swaps that are used to protect against changes in the fair value of fixed-rate long-term financial instruments due to movements in market interest rates.

#### (b) Cash flow hedge

The group's cash flow hedges consist principally of interest rate and currency swaps that are used to protect against exposures to variability in future interest and principal cash flows on non-trading assets and liabilities which bear interest at variable rates or which are expected to be re-funded or reinvested in the future. The amounts and timing of future cash flows, representing both principal and interest flows, are projected for each portfolio of financial assets and liabilities on the basis of their contractual terms and other relevant factors, including estimates of prepayments and defaults. The aggregate principal balances and interest cash flows across all portfolios over time form the basis for identifying gains and losses on the effective portions of derivatives designated as cash flow hedge of forecast transactions.

Gains and losses are initially recognised in equity, in the cash flow hedging reserve, and are transferred to the income statement when the forecast cash flows affect the income statement. During the year ended 31 December 2016, the amount of cash flow hedging reserve transferred to the income statement consist of HK\$175m (2015: HK\$101m) in net interest income and HK\$749m (2015: HK\$87m) in net trading income.

There was HK\$18m (2015: insignificant amount) gain of ineffectiveness recognised in the Group's income statement arising from cash flow hedge during 2016. During 2016, there were forecast transactions for which hedge accounting had previously been used but which were no longer expected to occur. A loss of HK\$1m for 2016 (2015: Nil) was recognised due to termination of such forecast transactions.

The schedules of forecast principal balances on which the expected interest cash flows associated with derivatives that are cash flow hedge were as follows:

	Three months or less	Over three months but within one year	Over one year but within five years
<b>At 31 December 2016</b>			
Cash inflows from assets	21,071	36,633	17,991
Cash outflows from liabilities	-	-	-
Net cash inflows	<u>21,071</u>	<u>36,633</u>	<u>17,991</u>
<b>At 31 December 2015</b>			
Cash inflows from assets	32,583	33,947	17,825
Cash outflows from liabilities	-	-	-
Net cash inflows	<u>32,583</u>	<u>33,947</u>	<u>17,825</u>

NOTES TO THE FINANCIAL STATEMENTS (continued)

31 Loans and advances to customers

(a) Loans and advances to customers

	2016	2015
Gross loans and advances to customers	700,851	690,561
Less:		
Loan impairment allowances		
- individually assessed	(923)	(807)
- collectively assessed	(936)	(808)
	<u>698,992</u>	<u>688,946</u>

Total loan impairment allowances as a percentage of gross loans and advances to customers are as follows:

	2016	2015
	%	%
Loan impairment allowances:		
- individually assessed	0.13	0.12
- collectively assessed	0.13	0.12
Total loan impairment allowances	<u>0.26</u>	<u>0.24</u>

(b) Loan impairment allowances against loans and advances to customers

	Individually assessed	Collectively assessed	Total
<b>2016</b>			
At 1 January	807	808	1,615
Amounts written off	(430)	(698)	(1,128)
Recoveries of loans and advances written off in previous years	80	74	154
New impairment allowances charged to income statement (note 13)	662	848	1,510
Impairment allowances released to income statement (note 13)	(123)	(74)	(197)
Unwinding of discount of loan impairment allowances recognised as "interest income"	(55)	(5)	(60)
Exchange difference	(18)	(17)	(35)
At 31 December	<u>923</u>	<u>936</u>	<u>1,859</u>
<b>2015</b>			
At 1 January	999	839	1,838
Amounts written off	(676)	(674)	(1,350)
Recoveries of loans and advances written off in previous years	16	76	92
New impairment allowances charged to income statement (note 13)	594	712	1,306
Impairment allowances released to income statement (note 13)	(66)	(132)	(198)
Unwinding of discount of loan impairment allowances recognised as "interest income"	(36)	(5)	(41)
Exchange difference	(24)	(8)	(32)
At 31 December	<u>807</u>	<u>808</u>	<u>1,615</u>

**NOTES TO THE FINANCIAL STATEMENTS** *(continued)*

**31 Loans and advances to customers** *(continued)*

**(c) Impaired loans and advances to customers and allowances**

	<b>2016</b>	2015
Gross impaired loans and advances	<b>3,235</b>	2,737
Individually assessed allowances	<b>(923)</b>	(807)
Net impaired loans and advances	<u><b>2,312</b></u>	<u>1,930</u>
Individually assessed allowances as a percentage of gross impaired loans and advances	<u><b>28.5%</b></u>	<u>29.5%</u>
Gross impaired loans and advances as a percentage of gross loans and advances to customers	<u><b>0.46%</b></u>	<u>0.40%</u>

Impaired loans and advances to customers are those loans and advances where objective evidence exists that full repayment of principal or interest is considered unlikely.

	<b>2016</b>	2015
Gross individually assessed impaired loans and advances	<b>2,968</b>	2,505
Individually assessed allowances	<b>(923)</b>	(807)
	<u><b>2,045</b></u>	<u>1,698</u>
Gross individually assessed impaired loans and advances as a percentage of gross loans and advances to customers	<u><b>0.42%</b></u>	<u>0.36%</u>
Amount of collateral which has been taken into account in respect of individually assessed impaired loans and advances to customers	<u><b>1,701</b></u>	<u>1,651</u>

Collateral includes any tangible security that carries a fair market value and is readily marketable. This includes (but is not limited to) cash and deposits, stocks and bonds, mortgages over properties and charges over other fixed assets such as plant and equipment. Where collateral values are greater than gross loans and advances to customers, only the amount of collateral up to the gross loans and advances is included.



## NOTES TO THE FINANCIAL STATEMENTS (continued)

### 31 Loans and advances to customers (continued)

#### (d) Overdue loans and advances to customers

Loans and advances to customers that are more than three months overdue and their expression as a percentage of gross loans and advances to customers are as follows:

2016	%	
Gross loans and advances		
which have been overdue with respect to		
either principal or interest for periods of:		
- more than three months but not more than six months	438	0.06
- more than six months but not more than one year	580	0.08
- more than one year	<u>1,336</u>	<u>0.19</u>
	<u>2,354</u>	<u>0.33</u>
of which:		
- individually impaired allowances	(726)	
- covered portion of overdue loans and advances	1,419	
- uncovered portion of overdue loans and advances	935	
- current market value of collateral held against the		
covered portion of overdue loans and advances	2,653	

2015

Gross loans and advances		
which have been overdue with respect to		
either principal or interest for periods of:		
- more than three months but not more than six months	696	0.10
- more than six months but not more than one year	543	0.08
- more than one year	<u>912</u>	<u>0.13</u>
	<u>2,151</u>	<u>0.31</u>
of which:		
- individually impaired allowances	(759)	
- covered portion of overdue loans and advances	1,141	
- uncovered portion of overdue loans and advances	1,010	
- current market value of collateral held against the		
covered portion of overdue loans and advances	2,527	

Collateral held with respect to overdue loans and advances is mainly residential properties and commercial properties. The current market value of residential properties and commercial properties were HK\$1,349m and HK\$390m respectively (2015: HK\$1,307m and HK\$122m respectively).

Loans and advances with a specific repayment date are classified as overdue when the principal or interest is overdue and remains unpaid at period-end. Loans and advances repayable by regular instalments are treated as overdue when an instalment payment is overdue and remains unpaid at period-end. Loans and advances repayable on demand are classified as overdue either when a demand for repayment has been served on the borrower but repayment has not been made in accordance with the demand notice, or when the loans and advances have remained continuously outside the approved limit advised to the borrower for more than the overdue period in question.

**NOTES TO THE FINANCIAL STATEMENTS** (continued)

**31 Loans and advances to customers** (continued)

**(e) Rescheduled loans and advances to customers**

Rescheduled loans and advances to customers and their expression as a percentage of gross loans and advances to customers are as follows:

		%
<b>2016</b>	<u><u>458</u></u>	<u><u>0.07</u></u>
2015	<u><u>140</u></u>	<u><u>0.02</u></u>

Rescheduled loans and advances to customers are those loans and advances that have been rescheduled or renegotiated for reasons related to the borrower's financial difficulties. This will normally involve the granting of concessionary terms and resetting the overdue account to non-overdue status.

Rescheduled loans and advances to customers are stated net of any advances which have subsequently become overdue for more than three months and which are included in "Overdue loans and advances to customers" (note 31(d)).

**(f) Segmental analysis of loans and advances to customers by geographical area**

Loans and advances to customers by geographical area are classified according to the location of the counterparties after taking into account the transfer of risk. In general, risk transfer applies when a loan is guaranteed by a party located in an area that is different from that of the counterparty.

	Gross loans and advances	Individually impaired loans and advances	Overdue loans and advances	Individually assessed allowances	Collectively assessed allowances
<b>At 31 December 2016</b>					
Hong Kong	595,733	2,027	1,885	536	707
Mainland China	75,037	924	462	380	170
Others	30,081	17	7	7	59
	<u><u>700,851</u></u>	<u><u>2,968</u></u>	<u><u>2,354</u></u>	<u><u>923</u></u>	<u><u>936</u></u>
<b>At 31 December 2015</b>					
Hong Kong	567,668	1,667	1,539	414	605
Mainland China	97,131	829	611	392	171
Others	25,762	9	1	1	32
	<u><u>690,561</u></u>	<u><u>2,505</u></u>	<u><u>2,151</u></u>	<u><u>807</u></u>	<u><u>808</u></u>

**NOTES TO THE FINANCIAL STATEMENTS** (continued)

**31 Loans and advances to customers** (continued)

**(g) Gross loans and advances to customers by industry sector**

The analysis of gross loans and advances to customers by industry sector based on categories and definitions used by the Hong Kong Monetary Authority is as follows:

	2016	% of gross advances covered by collateral	2015	% of gross advances covered by collateral
<b>Gross loans and advances to customers for use in Hong Kong</b>				
<b>Industrial, commercial and financial sectors</b>				
- property development	51,935	44.4	43,951	46.7
- property investment	119,553	86.4	108,840	90.5
- financial concerns	5,049	55.0	5,556	28.7
- stockbrokers	141	92.9	32	96.9
- wholesale and retail trade	26,880	48.5	27,272	43.0
- manufacturing	23,079	41.6	21,478	43.2
- transport and transport equipment	9,302	67.7	9,608	68.5
- recreational activities	48	77.8	114	11.5
- information technology	6,624	13.3	3,821	18.1
- other	46,523	66.0	42,307	62.8
	<u>289,134</u>	65.7	<u>262,979</u>	66.7
<b>Individuals</b>				
- loans and advances for the purchase of flats under the Government Home Ownership Scheme, Private Sector Participation Scheme and Tenants Purchase Scheme	17,808	100.0	16,446	100.0
- loans and advances for the purchase of other residential properties	161,165	100.0	158,275	100.0
- credit card loans and advances	27,019	-	25,982	-
- other	20,385	43.0	19,737	40.6
	<u>226,377</u>	82.9	<u>220,440</u>	82.9
<b>Total gross loans and advances for use in Hong Kong</b>	<b>515,511</b>	<b>73.2</b>	<b>483,419</b>	<b>74.1</b>
<b>Trade finance</b>	<b>43,235</b>	<b>22.7</b>	<b>46,885</b>	<b>22.0</b>
<b>Gross loans and advances for use outside Hong Kong</b>	<b>142,105</b>	<b>33.0</b>	<b>160,257</b>	<b>31.0</b>
<b>Gross loans and advances to customers</b>	<b><u>700,851</u></b>	<b>62.0</b>	<b><u>690,561</u></b>	<b>60.6</b>

**NOTES TO THE FINANCIAL STATEMENTS** *(continued)*

**31 Loans and advances to customers** *(continued)*

**(h) Net investments in finance leases**

Loans and advances to customers include net investments in equipment leased to customers under finance leases and hire purchase contracts having the characteristics of finance leases. The contracts usually run for an initial period of 5 to 25 years, with an option for acquiring by the lessee the leased asset at nominal value at the end of the lease period. The total minimum lease payments receivable and their present value at the year-end are as follows:

	<b>2016</b>	2015
Finance leases	-	-
Hire purchase contracts	<u>6,041</u>	<u>5,903</u>
	<u><b>6,041</b></u>	<u><b>5,903</b></u>

	<b>Present value of minimum lease payments receivable</b>	<b>Interest income relating to future periods</b>	<b>Total minimum lease payments receivable</b>
<b>2016</b>			
Amounts receivable:			
- within one year	<b>302</b>	<b>118</b>	<b>420</b>
- after one year but within five years	<b>1,202</b>	<b>415</b>	<b>1,617</b>
- after five years	<u>4,537</u>	<u>811</u>	<u>5,348</u>
	<u><b>6,041</b></u>	<u><b>1,344</b></u>	<u><b>7,385</b></u>
Loans impairment allowances	-		
Net investments in finance leases and hire purchase contracts	<u><b>6,041</b></u>		

**2015**

Amounts receivable:			
- within one year	315	105	420
- after one year but within five years	1,179	365	1,544
- after five years	<u>4,409</u>	<u>717</u>	<u>5,126</u>
	<u>5,903</u>	<u>1,187</u>	<u>7,090</u>
Loans impairment allowances	-		
Net investments in finance leases and hire purchase contracts	<u><b>5,903</b></u>		

NOTES TO THE FINANCIAL STATEMENTS (continued)

32 Financial investments

	2016	2015
Available-for-sale at fair value:		
- treasury bills	180,951	152,014
- debt securities <sup>1</sup>	125,985	133,794
- equity securities (including investment funds)	4,301	4,642
	<u>311,237</u>	<u>290,450</u>
Held-to-maturity at amortised cost:		
- debt securities <sup>2</sup>	86,900	81,822
	<u>398,137</u>	<u>372,272</u>

<sup>1</sup> Including certificates of deposit of HK\$5,320m (2015: HK\$6,519m)

<sup>2</sup> Including certificates of deposit of HK\$3,890m (2015: HK\$5,534m)

There were no overdue debt securities at 31 December 2016 (2015: Nil). The Group did not hold any asset-backed securities, mortgage-backed securities and collateralised debt obligations.

There were no financial investments determined to be impaired at 31 December 2016 (2015: Nil).

(a) Available-for-sale

	2016			2015		
	Treasury bills	Debt securities	Equity securities	Treasury bills	Debt securities	Equity securities
Issued by public bodies:						
- central governments and central banks	180,334	54,485	-	152,014	70,963	-
- other public sector entities	617	16,417	-	-	14,966	-
	<u>180,951</u>	<u>70,902</u>	<u>-</u>	<u>152,014</u>	<u>85,929</u>	<u>-</u>
Issued by other bodies:						
- banks	-	51,322	3,657	-	42,665	4,096
- corporate entities	-	3,761	644	-	5,200	546
	<u>-</u>	<u>55,083</u>	<u>4,301</u>	<u>-</u>	<u>47,865</u>	<u>4,642</u>
	<u>180,951</u>	<u>125,985</u>	<u>4,301</u>	<u>152,014</u>	<u>133,794</u>	<u>4,642</u>
- listed	13,322	112,701	3,079	13,607	112,366	3,472
- unlisted	167,629	13,284	1,222	138,407	21,428	1,170
	<u>180,951</u>	<u>125,985</u>	<u>4,301</u>	<u>152,014</u>	<u>133,794</u>	<u>4,642</u>

(b) Held-to-maturity debt securities

	2016		2015	
	Carrying amounts	Fair value	Carrying amounts	Fair value
Issued by public bodies:				
- central governments and central banks	621	714	612	709
- other public sector entities	11,284	11,436	10,993	11,472
	<u>11,905</u>	<u>12,150</u>	<u>11,605</u>	<u>12,181</u>
Issued by other bodies:				
- banks	32,212	32,598	33,175	34,349
- corporate entities	42,783	42,627	37,042	38,041
	<u>74,995</u>	<u>75,225</u>	<u>70,217</u>	<u>72,390</u>
	<u>86,900</u>	<u>87,375</u>	<u>81,822</u>	<u>84,571</u>
- listed	23,713	23,898	21,154	21,606
- unlisted	63,187	63,477	60,668	62,965
	<u>86,900</u>	<u>87,375</u>	<u>81,822</u>	<u>84,571</u>

**NOTES TO THE FINANCIAL STATEMENTS** *(continued)*

**33 Assets transferred, assets charged as security for liabilities, and collateral accepted as security for assets**

**(a) Financial assets pledged to secure liabilities**

	<b>2016</b>	2015
Trading assets and financial investments	<u><b>42,588</b></u>	<u>39,232</u>

The table above shows assets where a charge has been granted to secure liabilities on a legal and contractual basis.

These transactions are conducted under terms that are usual and customary to collateralised transactions including, where relevant, standard securities lending and repurchase agreements.

**(b) Transferred financial assets not qualifying for full derecognition and their associated financial liabilities**

	<b>2016</b>		2015	
	<b>Carrying amount of transferred assets</b>	<b>Carrying amount of associated liabilities</b>	Carrying amount of transferred assets	Carrying amount of associated liabilities
Repurchase agreement	<b>1,852</b>	<b>1,805</b>	2,416	2,315
Securities lending agreements	<u><b>2,574</b></u>	-	<u>923</u>	-
	<u><b>4,426</b></u>	<u><b>1,805</b></u>	<u>3,339</u>	<u>2,315</u>

The financial assets shown above include amounts transferred to third parties that do not qualify for derecognition are mainly debt securities held by counterparties as collateral under repurchase agreements and securities lent under securities lending agreements. As the substance of these transactions is secured borrowings, the collateral assets continue to be recognised in full and the related liabilities, reflecting the Group's obligation to repurchase the transferred assets for a fixed price at a future date, are also recognised on the balance sheet. As a result of these transactions, the Group is unable to use, sell or pledge the transferred assets for the duration of the transactions. The Group remains exposed to interest rate risk, credit risk and market risk on these pledged instruments. The counterparty's recourse is not limited to the transferred assets.

**(c) Collateral accepted as security for assets**

There were no collateral permitted to sell or repledge in the absence of default and collateral actually sold or repledged in 2016 and 2015.

## NOTES TO THE FINANCIAL STATEMENTS (continued)

### 34 Subsidiaries

The following is a list of the principal subsidiaries at 31 December 2016:

<u>Name of company</u>	<u>Place of incorporation</u>	<u>Principal activities</u>	<u>Issued equity capital</u>
Hang Seng Bank (China) Limited	People's Republic of China	Banking	RMB8,317,500,000
Hang Seng Finance Limited	Hong Kong SAR	Lending	HK\$1,000,000,000
Hang Seng Credit Limited	Hong Kong SAR	Lending	HK\$200,000,000
Hang Seng Bank (Trustee) Limited	Hong Kong SAR	Trustee service	HK\$3,000,000
Hang Seng (Nominee) Limited	Hong Kong SAR	Nominee service	HK\$100,000
Hang Seng Life Limited	Hong Kong SAR	Retirement benefits and life assurance	HK\$970,000,000
Hang Seng Insurance Company Limited	Hong Kong SAR	Retirement benefits and life assurance	HK\$6,426,184,570
Hang Seng Investment Management Limited	Hong Kong SAR	Fund management	HK\$10,000,000
Haseba Investment Company Limited	Hong Kong SAR	Investment holding	HK\$6,000
Hang Seng Securities Limited	Hong Kong SAR	Stockbroking	HK\$26,000,000
Yan Nin Development Company Limited	Hong Kong SAR	Investment holding	HK\$100,000
Hang Seng Indexes Company Limited	Hong Kong SAR	Compilation and dissemination of the Hang Seng share index	HK\$10,000
Hang Seng Real Estate Management Limited	Hong Kong SAR	Property management	HK\$10,000
High Time Investments Limited	Hong Kong SAR	Investment holding	HK\$2,250,010,000

All the above companies are wholly-owned subsidiaries and unlisted. All subsidiaries are held directly by the Bank except for Hang Seng Life Limited and Hang Seng Indexes Company Limited. The principal places of operation are the same as the places of incorporation.

During the year, the Bank and Shenzhen Qianhai Financial Holdings Company Limited ("QFH") established a joint venture, Hang Seng Qianhai Fund Management Company Limited ("Hang Seng Qianhai Fund Management"). Hang Seng Qianhai Fund Management is the first foreign-majority-owned joint venture fund management company established on the Mainland under Supplement X to the Mainland and Hong Kong Closer Economic Partnership Arrangement ("CEPA"). The Bank has a 70% stake in the joint venture and QFH holds 30%. The principal activities of the new subsidiary includes fund raising, fund sales and asset management. The place of incorporation of Hang Seng Qianhai Fund Management is People's Republic of China with an issued equity capital of RMB200,000,000.

Some principal subsidiaries are regulated banking and insurance entities and as such, are required to maintain certain minimum levels of capital and liquid assets to support their operations. The effect of these regulatory requirements is to limit the extent to which the subsidiaries may transfer funds to the Bank in the form of repayment of certain shareholder loans or cash dividends.

NOTES TO THE FINANCIAL STATEMENTS (continued)

35 Interest in associates

	2016	2015
Share of net assets	<u>2,274</u>	<u>2,275</u>

The associates are:

<u>Name of company</u>	<u>Place of incorporation and operation</u>	<u>Principal activity</u>	<u>Group's interest in equity capital</u>	<u>Issued equity capital</u>
<b>Unlisted</b>				
Barrowgate Limited	Hong Kong SAR	Property investment	24.64%	HK\$10,000
GZHS Research Co., Ltd.	People's Republic of China	Conduct market/securities analysis and publish research reports	33.00%	RMB44,680,000

The interests in Barrowgate Limited and GZHS Research Co., Ltd. ("GZHS") are owned by the subsidiaries of the Bank.

The above two associates are accounted for using the equity method in the consolidated financial statements as at 31 December 2016 and 2015.

For the year ended 31 December 2016, the financial results of GZHS was included in the financial statements based on financial statements drawn up to 30 September 2016, but taking into account any changes in the subsequent period from 1 October 2016 to 31 December 2016 that would materially affect the results. The Group has taken advantage of the provision contained in HKAS 28 (2011) "Investments in Associates and Joint Ventures" whereby it is permitted to include the attributable share of associates' results based on accounts drawn up to a non-coterminous period end where the difference must be no greater than three months.

	Assets	Liabilities	Equity	Revenue	Expenses	Revenue Less Expenses
<b>2016</b>						
100 per cent	10,521	1,295	9,226	608	232	376
The Group's effective interest	2,596	322	2,274	154	61	93
 2015						
100 per cent	10,502	1,271	9,231	826	163	663
The Group's effective interest	2,590	315	2,275	219	67	152

At 31 December 2016, the investment in GZHS was tested for impairment by estimating the recoverable amount of the investment based on "value in use". Nil impairment loss was recognised since the recoverable amount exceeded the carrying amount (2015: HK\$13m).



**NOTES TO THE FINANCIAL STATEMENTS** (continued)

**36 Investment properties**

The Group's investment properties were revalued by DTZ Cushman & Wakefield Limited, an independent professional valuer, at 30 November 2016, and were updated for any material changes in the valuation as at 31 December 2016. The valuations were carried out by qualified persons who are members of the Hong Kong Institute of Surveyors. The basis of valuations of investment properties were market value which is consistent with the definition of fair value under HKFRS 13 "Fair Value Measurement" and take into account the highest and best use of the property from the perspective of market participants.

**(a) Movement of investment properties**

	<b>2016</b>	2015
At 1 January	<b>10,075</b>	11,732
Additions	-	699
Surplus on revaluation credited to income statement	<b>5</b>	417
Transfer to premises (note 37(a))	<b>(120)</b>	(2,773)
At 31 December	<b><u>9,960</u></b>	<u>10,075</u>
Representing:		
- measure at valuation	<b><u>9,960</u></b>	<u>10,075</u>

**(b) Terms of lease**

	<b>2016</b>	2015
<b>Leaseholds</b>		
Held in Hong Kong:		
- long leases (over 50 years unexpired)	<b>1,797</b>	1,732
- medium leases (10 to 50 years unexpired)	<b>8,163</b>	8,343
	<b><u>9,960</u></b>	<u>10,075</u>

(c) The Group leases out investment properties under operating leases. The leases typically run for an initial period of 2 to 3 years, and may contain an option to renew the lease after that date at which time all terms are renegotiated. None of the leases includes contingent rentals.

	<b>2016</b>	2015
Direct operating expenses arising from investment properties	<b><u>29</u></b>	<u>23</u>
Direct operating expenses arising from investment properties that generated rental income	<b><u>25</u></b>	<u>20</u>

The Group's total future minimum lease payments receivable under non-cancellable operating leases are as follows:

	<b>2016</b>	2015
Less than one year	<b>267</b>	287
Over one year but within five years	<b>165</b>	192
Over five years	<b>-</b>	-
	<b><u>432</u></b>	<u>479</u>

**NOTES TO THE FINANCIAL STATEMENTS** (continued)

**37 Premises, plant and equipment**

The Group's premises were revalued by DTZ Cushman & Wakefield Limited, an independent professional valuer, at 30 November 2016, and were updated for any material changes in the valuation as at 31 December 2016. The valuations were carried out by qualified persons who are members of the Hong Kong Institute of Surveyors. The basis of valuations of premises were market value which is consistent with the definition of fair value under HKFRS 13 "Fair Value Measurement" and take into account the highest and best use of the property from the perspective of market participants.

**(a) Movement of premises, plant and equipment**

	Premises	Plant and equipment	Total
<b>2016</b>			
Cost or valuation:			
At 1 January	25,108	4,505	29,613
Additions	147	655	802
Disposals	-	(192)	(192)
Elimination of accumulated depreciation on revalued premises	(764)	-	(764)
Surplus on revaluation:			
- credited to premises revaluation reserve	853	-	853
Transfer from investment properties (note 36(a))	120	-	120
Exchange adjustments and other	(55)	(34)	(89)
At 31 December	<u>25,409</u>	<u>4,934</u>	<u>30,343</u>
Accumulated depreciation:			
At 1 January	-	(3,427)	(3,427)
Exchange adjustments	-	27	27
Charge for the year (note 14)	(764)	(350)	(1,114)
Written off on disposal	-	179	179
Elimination of accumulated depreciation on revalued premises	764	-	764
At 31 December	<u>-</u>	<u>(3,571)</u>	<u>(3,571)</u>
Net book value at 31 December	<u>25,409</u>	<u>1,363</u>	<u>26,772</u>
Representing:			
- measure at cost	-	1,363	1,363
- measure at valuation	<u>25,409</u>	<u>-</u>	<u>25,409</u>
	<u>25,409</u>	<u>1,363</u>	<u>26,772</u>

**NOTES TO THE FINANCIAL STATEMENTS** (continued)

**37 Premises, plant and equipment** (continued)

**(a) Movement of premises, plant and equipment** (continued)

	Premises	Plant and equipment	Total
2015			
Cost or valuation:			
At 1 January	21,073	4,163	25,236
Additions	84	571	655
Disposals	-	(201)	(201)
Elimination of accumulated depreciation on revalued premises	(660)	-	(660)
Surplus on revaluation:			
- credited to premises revaluation reserve	1,878	-	1,878
Transfer from investment properties (note 36(a))	2,773	-	2,773
Exchange adjustments and other	(40)	(28)	(68)
At 31 December	<u>25,108</u>	<u>4,505</u>	<u>29,613</u>
Accumulated depreciation:			
At 1 January	-	(3,338)	(3,338)
Exchange adjustments	-	20	20
Charge for the year (note 14)	(660)	(297)	(957)
Written off on disposal	-	188	188
Elimination of accumulated depreciation on revalued premises	660	-	660
At 31 December	<u>-</u>	<u>(3,427)</u>	<u>(3,427)</u>
Net book value at 31 December	<u>25,108</u>	<u>1,078</u>	<u>26,186</u>
Representing:			
- measure at cost	-	1,078	1,078
- measure at valuation	<u>25,108</u>	<u>-</u>	<u>25,108</u>
	<u>25,108</u>	<u>1,078</u>	<u>26,186</u>

**(b) Terms of lease**

The net book value of premises comprises:

	2016	2015
<b>Leaseholds</b>		
Held in Hong Kong:		
- long leases (over 50 years unexpired)	2,441	2,561
- medium leases (10 to 50 years unexpired)	22,144	21,697
Held outside Hong Kong:		
- long leases (over 50 years unexpired)	-	-
- medium leases (10 to 50 years unexpired)	824	850
	<u>25,409</u>	<u>25,108</u>

**(c) The carrying amount of all premises which have been stated in the balance sheet would have been as follows had they been stated at cost less accumulated depreciation:**

	2016	2015
Cost less accumulated depreciation at 31 December	<u>6,401</u>	<u>5,854</u>

## NOTES TO THE FINANCIAL STATEMENTS *(continued)*

### 37 Premises, plant and equipment *(continued)*

#### (d) Fair value measurement of properties

##### (i) Fair value hierarchy

The level into which a fair value measurement is classified for properties is determined with reference to the observability and significance of the inputs used in the valuation technique as follows:

Level 1: Fair value measured using unadjusted quoted prices in active markets for identical assets or liabilities at the measurement date.

Level 2: Fair value measured using observable inputs and not using significant unobservable inputs. Unobservable inputs are inputs for which market data are not available.

Level 3: Fair value measured using significant unobservable inputs.

The resultant values of both investment properties and properties held for own use for the Group were Level 3 in the fair value hierarchy as defined in HKFRS 13 "*Fair value measurement*". During the year ended 31 December 2016, there were no transfers into or out of Level 3. (2015: Nil)

The fair value of investment properties is determined using Investment Approach on the basis of capitalisation of net incomes with due allowance for outgoings and reversionary income potential.

The fair values of the majorities of properties owned and occupied by the Group in Hong Kong and the PRC are determined using Direct Comparison Approach assuming sale with immediate vacant possession and by making reference to comparable sales evidence.

For properties with development potentials, their values are on redevelopment basis and reported upon the assessment on the basis that each of these properties will be developed to its full potential and completed to a good standard. The fair values are determined using Direct Comparison Approach by making reference to comparable sales transactions as available in the relevant market and have also taken into account the development costs that will be expended to complete the development.

**NOTES TO THE FINANCIAL STATEMENTS** (continued)

**37 Premises, plant and equipment** (continued)

**(d) Fair value measurement of properties** (continued)

(i) Fair value hierarchy (continued)

Reconciliation of fair value measurements in Level 3 of the fair value hierarchy

The following table provides a reconciliation of the movement between opening and closing balances of Level 3 properties, measured at fair value using a valuation technique with significant unobservable inputs:

	<b>Investment properties</b>	<b>Properties held for own use</b>
At 1 January 2016	10,075	25,108
Additions	-	147
Depreciation for the year	-	(764)
Surplus on revaluation:		
- credited to premises revaluation reserve	-	853
- credited to income statement	5	-
Transfer	(120)	120
Exchange adjustments and other	-	(55)
At 31 December 2016	<u>9,960</u>	<u>25,409</u>

Unrealised gains or losses recognised in profit or loss relating to those assets held at the end of the reporting period

- other operating income	42	-
- net deficit on property revaluation	(37)	-
- depreciation of premises, plant and equipment	-	(764)

	Investment properties	Properties held for own use
At 1 January 2015	11,732	21,073
Additions	699	84
Depreciation for the year	-	(660)
Surplus on revaluation:		
- credited to premises revaluation reserve	-	1,878
- credited to income statement	417	-
Transfer	(2,773)	2,773
Exchange adjustments and other	-	(40)
At 31 December 2015	<u>10,075</u>	<u>25,108</u>

Unrealised gains or losses recognised in profit or loss relating to those assets held at the end of the reporting period

- other operating income	156	-
- net surplus on property revaluation	261	-
- depreciation of premises, plant and equipment	-	(660)

**NOTES TO THE FINANCIAL STATEMENTS** (continued)

**37 Premises, plant and equipment** (continued)

(d) **Fair value measurement of properties** (continued)

(ii) Information about significant unobservable inputs in Level 3 valuations

	<u>Valuation technique(s)</u>	<u>Unobservable input(s)</u>	<u>Range</u>	
			<u>2016</u>	<u>2015</u>
Investment properties	Investment approach	Market yields (reversionary yield)	2.7% to 5.0%	2.8% to 5.5%
		Market rental	HK\$18.4 to HK\$780 per square foot	HK\$18 to HK\$890 per square foot
Premises held for own use	Direct comparison approach	Premium (discount) on characteristic of the properties	-20% to 20%	-20% to 20%

The fair value measurement for investment properties is positively correlated to the market rental but inversely correlated to the market yields. The valuations for premises held for own use take into account the characteristic of the properties which included the location, size, shape, view, floor level, year of completion and other factors collectively. Higher premium for properties with better characteristic will result in a higher fair value measurement.

**38 Intangible assets**

	<b>2016</b>	2015
Present value of in-force long-term insurance business	<b>13,664</b>	11,431
Internally developed software	<b>394</b>	379
Acquired software	<b>56</b>	82
Goodwill	<b>329</b>	329
	<b><u>14,443</u></b>	<u>12,221</u>

(a) **Movement of present value of in-force long-term insurance business ("PVIF")**

	<b>2016</b>	2015
At 1 January	<b>11,431</b>	8,263
Addition from current year new business (note 11)	<b>1,906</b>	1,568
Movement from in-force business (note 11)	<b>327</b>	1,600
At 31 December	<b><u>13,664</u></b>	<u>11,431</u>

The key assumptions used in the computation of "PVIF" are as follows:

	<b>2016</b>	2015
Risk discount rate	<b>5.4%</b>	5.4%
Expenses inflation	<b>3.0%</b>	3.0%
Average lapse rate:		
- 1st year	<b>3.2%</b>	3.1%
- 2nd year onwards	<b>2.1%</b>	3.0%

The sensitivity of PVIF valuation to changes in individual assumptions at the balance sheet dates is shown in the Management Discussion and Analysis.

## NOTES TO THE FINANCIAL STATEMENTS (continued)

### 38 Intangible assets (continued)

#### (b) Goodwill

	2016	2015
At 1 January and at 31 December	<u>329</u>	<u>329</u>

Goodwill arising from acquisition of the remaining 50 per cent of Hang Seng Life Limited from HSBC Insurance (Asia-Pacific) Holdings Limited amounted to HK\$329m is allocated to cash-generating units of Life Insurance - Hang Seng Insurance Company Limited ("HSIC") for the purpose of impairment testing.

During 2016, there was no impairment of goodwill (2015: Nil). Impairment testing in respect of goodwill is performed annually by comparing the recoverable amount of cash generating unit based on appraisal value with the carrying amount of its net assets, including attributable goodwill.

The appraisal value comprises HSIC's net assets (other than value of business acquired and goodwill), the PVIF and the expected value of future business as at 31 December 2016. The PVIF is determined by discounting future earnings expected from the current business, taking into account factors such as future mortality, lapse rates, levels of expenses and risk discount rate. The above details are shown in note 38(a) and the Management Discussion and Analysis.

#### (c) Movement of internally developed application software and acquired software

	2016	2015
Cost:		
At 1 January	1,418	1,298
Additions	97	138
Disposals	(17)	(11)
Exchange and others	(9)	(7)
At 31 December	<u>1,489</u>	<u>1,418</u>
Accumulated amortisation:		
At 1 January	(957)	(837)
Charge for the year (note 14)	(105)	(110)
Impairment	-	(24)
Written off on disposal	17	11
Exchange and others	6	3
At 31 December	<u>(1,039)</u>	<u>(957)</u>
Net book value at 31 December	<u>450</u>	<u>461</u>

During 2016, no impairment (2015: HK\$24m) was made on internally developed application software and acquired software.

### 39 Other assets

	2016	2015
Items in the course of collection from other banks	6,354	6,922
Bullion	4,440	3,536
Prepayments and accrued income	3,378	3,717
Acceptances and endorsements	5,292	5,724
Reinsurers' share of liabilities under insurance contracts (note 45)	7,395	5,782
Other accounts	3,401	2,794
	<u>30,260</u>	<u>28,475</u>

Other accounts include "Assets held for sale" of HK\$24m (2015: HK\$33m). It also includes "Retirement benefit assets" of HK\$45m (2015: HK\$42m).

There was no accumulated loss recognised directly in equity relating to assets held for sale for 2016 and 2015.

There was no significant impaired, overdue or rescheduled other assets at the year-end of 2016 and 2015.

## NOTES TO THE FINANCIAL STATEMENTS (continued)

### 40 Current, savings and other deposit accounts

	2016	2015
Current, savings and other deposit accounts:		
- as stated in consolidated balance sheet	989,539	959,228
- structured deposits reported as trading liabilities (note 41)	26,090	27,440
	<u>1,015,629</u>	<u>986,668</u>
By type:		
- demand and current accounts	99,051	86,644
- savings accounts	686,371	615,135
- time and other deposits	230,207	284,889
	<u>1,015,629</u>	<u>986,668</u>

### 41 Trading liabilities

	2016	2015
Other structured debt securities in issue (note 43)	5,026	2,351
Structured deposits (note 40)	26,090	27,440
Short positions in securities and others	37,008	33,126
	<u>68,124</u>	<u>62,917</u>

### 42 Financial liabilities designated at fair value

	2016	2015
Certificates of deposit in issue (note 43)	3,484	3,491
Liabilities to customers under investment contracts	507	503
	<u>3,991</u>	<u>3,994</u>

At 31 December 2016, the accumulated gain in fair value attributable to changes in credit risk for certificates of deposit in issue was HK\$7m (2015: HK\$19m).

### 43 Certificates of deposit and other debt securities in issue

	2016	2015
Certificates of deposit and other debt securities in issue:		
- as stated in consolidated balance sheet	5,116	5,191
- certificates of deposit in issue designated at fair value (note 42)	3,484	3,491
- other structured debt securities in issue reported as trading liabilities (note 41)	5,026	2,351
	<u>13,626</u>	<u>11,033</u>
By type:		
- certificates of deposit in issue	7,484	7,491
- other debt securities in issue	6,142	3,542
	<u>13,626</u>	<u>11,033</u>

### 44 Other liabilities

	2016	2015
Items in the course of transmission to other banks	11,276	7,586
Accruals	3,201	3,531
Acceptances and endorsements	5,292	5,724
Retirement benefit liabilities	626	1,013
Other	4,370	3,037
	<u>24,765</u>	<u>20,891</u>



NOTES TO THE FINANCIAL STATEMENTS (continued)

45 Liabilities under insurance contracts

	Gross	Reinsurers' share <sup>1</sup>	Net
<b>2016</b>			
<b>Non-linked insurance contracts</b>			
At 1 January	101,746	(5,782)	95,964
Benefits paid	(8,393)	129	(8,264)
Increase in liabilities to policyholders	15,282	(1,754)	13,528
Exchange and other movements	(379)	12	(367)
At 31 December	<u>108,256</u>	<u>(7,395)</u>	<u>100,861</u>
<b>Linked insurance contracts</b>			
At 1 January	71	-	71
Benefits paid	(7)	-	(7)
Increase in liabilities to policyholders	6	-	6
Exchange and other movements	-	-	-
At 31 December	<u>70</u>	<u>-</u>	<u>70</u>
	<u>108,326</u>	<u>(7,395)</u>	<u>100,931</u>
<b>2015</b>			
<b>Non-linked insurance contracts</b>			
At 1 January	92,356	(2,776)	89,580
Benefits paid	(7,067)	75	(6,992)
Increase in liabilities to policyholders	16,043	(3,072)	12,971
Exchange and other movements	414	(9)	405
At 31 December	<u>101,746</u>	<u>(5,782)</u>	<u>95,964</u>
<b>Linked insurance contracts</b>			
At 1 January	86	-	86
Benefits paid	(12)	-	(12)
Decrease in liabilities to policyholders	(3)	-	(3)
Exchange and other movements	-	-	-
At 31 December	<u>71</u>	<u>-</u>	<u>71</u>
	<u>101,817</u>	<u>(5,782)</u>	<u>96,035</u>

<sup>1</sup> Amounts recoverable from reinsurance of liabilities under insurance contracts are included in the consolidated balance sheet in "Other assets".

46 Current tax and deferred tax

(a) Current tax and deferred tax are represented in the balance sheet:

	2016	2015
Included in "Other assets":		
Current taxation recoverable	197	3
Deferred tax assets	158	115
	<u>355</u>	<u>118</u>
Current tax liabilities:		
Provision for Hong Kong profits tax	5	167
Provision for taxation outside Hong Kong	20	18
	<u>25</u>	<u>185</u>
Deferred tax liabilities	5,160	4,817
	<u>5,185</u>	<u>5,002</u>

**NOTES TO THE FINANCIAL STATEMENTS** (continued)

**46 Current tax and deferred tax** (continued)

**(b) Deferred tax assets and liabilities recognised**

The major components of deferred tax (assets)/liabilities recognised in the balance sheet and the movements during the year are as follows:

	Depreciation allowances in excess of related depreciation	Revaluation of properties	Loan impairment allowances	Fair value adjustments for available- for-sale financial assets	Cash flow hedge	Other	Total
<b>2016</b>							
At 1 January	188	3,410	(193)	31	(1)	1,267	4,702
Exchange adjustment	-	(4)	12	(2)	-	3	9
Charged/(credited) to income statement (note 20(a))	43	(95)	(62)	-	-	321	207
Charged/(credited) to reserves	-	144	-	(57)	(24)	21	84
At 31 December	<u>231</u>	<u>3,455</u>	<u>(243)</u>	<u>(28)</u>	<u>(25)</u>	<u>1,612</u>	<u>5,002</u>
<b>2015</b>							
At 1 January	179	3,171	(120)	54	(2)	942	4,224
Exchange adjustment	-	(2)	5	(3)	-	5	5
Charged/(credited) to income statement (note 20(a))	9	(73)	(78)	-	-	250	108
Charged/(credited) to reserves	-	314	-	(20)	1	70	365
At 31 December	<u>188</u>	<u>3,410</u>	<u>(193)</u>	<u>31</u>	<u>(1)</u>	<u>1,267</u>	<u>4,702</u>

**(c) Deferred tax assets not recognised**

The amounts of unused tax losses and other temporary difference for which no deferred tax asset is recognised in the balance sheet are HK\$264m and HK\$257m (2015: HK\$248m and Nil) respectively. Of these amounts, HK\$238m and HK\$257m (2015: HK\$248m and Nil) have no expiry date and the remaining will expire within 10 years.

**(d) Deferred tax liabilities not recognised**

There were no deferred tax liabilities not recognised as at 31 December 2016 (31 December 2015: Nil).

NOTES TO THE FINANCIAL STATEMENTS (continued)

47 Subordinated liabilities

Nominal value	Description	2016	2015
<b>Amount owed to HSBC Group undertakings</b>			
US\$300 million	Floating rate subordinated loan due July 2022 <sup>1</sup>	<u>2,327</u>	<u>2,325</u>
Representing:			
- measured at amortised cost		<u>2,327</u>	<u>2,325</u>

<sup>1</sup> Interest rate at three-month US dollar LIBOR plus 4.06 per cent per annum, payable quarterly, to the maturity date.

The outstanding subordinated loan serves to help the Bank maintain a balanced capital structure and support business growth.

The Group has not had any defaults of principal, interest or other breaches with respect to its debt securities during the years of 2016 and 2015.

48 Share capital

	2016		2015	
	No. of shares	HK\$	No. of shares	HK\$
<b>Ordinary shares, issued and fully paid</b>				
At 1 January and 31 December	<u>1,911,842,736</u>	<u>9,658</u>	<u>1,911,842,736</u>	<u>9,658</u>

49 Other equity instruments

Nominal value	Description	2016	2015
US\$900 million	Floating rate perpetual capital instrument callable from December 2019 <sup>1</sup>	<u>6,981</u>	<u>6,981</u>

<sup>1</sup> Coupon rate at one-year US dollar LIBOR plus 3.84 per cent.

The additional tier 1 capital instruments are perpetual and subordinated, and the coupon payments may be cancelled at the sole discretion of the Bank. The capital instruments will be written down at the point of non-viability on the occurrence of a trigger event as defined in the Banking (Capital) Rules. They rank higher than ordinary shares in the event of a winding-up.

## NOTES TO THE FINANCIAL STATEMENTS (continued)

### 50 Reconciliation of cash flow statement

#### (a) Reconciliation of operating profit to net cash flow from operating activities

	2016	2015
Operating profit	19,034	19,439
Net interest income	(22,254)	(21,165)
Dividend income	(190)	(142)
Loan impairment charges and other credit risk provisions	1,313	1,108
Impairment loss of intangible assets	-	24
Depreciation	1,114	957
Amortisation of intangible assets	105	110
Gains less losses from financial investments	(73)	(16)
Loans and advances written off net of recoveries	(974)	(1,258)
Movement in present value of in-force long-term insurance business	(2,233)	(3,168)
Interest received	23,050	24,851
Interest paid	(3,817)	(5,196)
<b>Operating profit before changes in working capital</b>	<b>15,075</b>	<b>15,544</b>
Change in treasury bills and certificates of deposit with original maturity more than three months	(36,473)	(29,328)
Change in placings with and advances to banks maturing after one month	(5,132)	2,860
Change in trading assets	5,397	(930)
Change in derivative financial instruments	(1,926)	(507)
Change in reverse repurchase agreements – non-trading	-	1,296
Change in loans and advances to customers	(10,739)	(34,813)
Change in other assets	(2,159)	(1,485)
Change in financial liabilities designated at fair value	(7)	497
Change in current, savings and other deposit accounts	30,311	62,707
Change in repurchase agreements - non trading	(510)	2,315
Change in deposits from banks	(4,147)	9,211
Change in trading liabilities	5,207	(9,670)
Change in certificates of deposit and other debt securities in issue	(75)	(7,211)
Change in other liabilities	2,172	5,400
Elimination of exchange differences and other non-cash items	6,430	1,396
<b>Cash generated from operating activities</b>	<b>3,424</b>	<b>17,282</b>

#### (b) Analysis of the balances of cash and cash equivalents

	2016	2015
Cash and sight balances at central banks	23,299	10,118
Balances with banks	7,456	13,446
Items in the course of collection from other banks	6,354	6,922
Placings with and advances to banks maturing within one month	35,208	55,792
Treasury bills	26,360	25,705
Less: items in the course of transmission to other banks	(11,276)	(7,586)
	<b>87,401</b>	<b>104,397</b>

The balances of cash and cash equivalents included cash and sight balances at central banks, balances with banks and placings with and advances to banks maturing within one month that are subject to exchange control and regulatory restrictions, amounting to HK\$17,652m at 31 December 2016 (31 December 2015: HK\$15,098m).

NOTES TO THE FINANCIAL STATEMENTS (continued)

51 Contingent liabilities and commitments

(a) Off-balance sheet contingent liabilities and commitments

	2016	2015
<b>Contingent liabilities and financial guarantee contracts</b>		
Guarantee and irrevocable letters of credit pledged as collateral security	17,925	14,485
Other contingent liabilities	91	113
	<u>18,016</u>	<u>14,598</u>
<b>Commitments</b>		
Documentary credits and short-term trade-related transactions	2,110	1,902
Forward asset purchases and forward deposits placed	788	403
Undrawn formal standby facilities, credit lines and other commitments to lend	379,246	361,969
	<u>382,144</u>	<u>364,274</u>

The above "Commitments" table discloses the nominal principal amounts of commitments excluding capital commitments, guarantees and other contingent liabilities, which are mainly credit-related instruments including both financial and non-financial guarantees and commitments to extend credit. Contractual amounts represent the amounts at risk should contracts be fully drawn upon and clients default. The amount of the loan commitments shown above reflects, where relevant, the expected level of take-up of pre-approved facilities. Since a significant portion of guarantees and commitments are expected to expire without being drawn upon, the total of the contractual amounts is not representative of future liquidity requirements.

(b) Contingencies

There is no material litigation expected to result in a significant adverse effect on the financial position of the Group, either collectively or individually. Management believes that adequate provisions have been made in respect of such litigation.

52 Other commitments

(a) Capital commitments

At 31 December 2016, capital commitments, mainly related to the commitment for renovation of branches and offices, were HK\$555m (2015: HK\$825m).

(b) Lease commitments

The Group leases certain properties and equipment under operating leases. The leases typically run for an initial period of one to five years and may include an option to renew the lease when all terms are renegotiated. None of these leases includes contingent rentals.

The total future minimum lease payments payable under non-cancellable operating leases are as follows:

	2016	2015
Within one year	598	623
Between one and five years	1,010	1,128
Over five years	35	29
	<u>1,643</u>	<u>1,780</u>

NOTES TO THE FINANCIAL STATEMENTS (continued)

53 Offsetting of financial assets and financial liabilities

	Amounts subject to enforceable netting arrangements						Net amount	Amounts not subject to enforceable netting agreements <sup>1</sup>	Balance sheet total
	Effects of offsetting in the balance sheet			Amounts not set-off in the balance sheet					
	Gross amounts	Amounts offset	Amounts reported in the balance sheet	Financial instruments	Non-cash collateral	Cash collateral			
<b>Financial assets</b>									
Derivatives	15,687	-	15,687	(11,202)	-	(2,262)	2,223	1,008	16,695
Reverse repos, stock borrowing and similar agreements classified as:									
- trading assets	-	-	-	-	-	-	-	-	-
- non-trading assets	-	-	-	-	-	-	-	-	-
Loans and advances to customers at amortised cost	836	(770)	66	-	-	-	66	-	66
<b>At 31 December 2016</b>	<b>16,523</b>	<b>(770)</b>	<b>15,753</b>	<b>(11,202)</b>	<b>-</b>	<b>(2,262)</b>	<b>2,289</b>	<b>1,008</b>	<b>16,761</b> <sup>2</sup>
Derivatives	10,960	-	10,960	(6,076)	-	(330)	4,554	635	11,595
Reverse repos, stock borrowing and similar agreements classified as:									
- trading assets	-	-	-	-	-	-	-	-	-
- non-trading assets	-	-	-	-	-	-	-	-	-
Loans and advances to customers at amortised cost	789	(720)	69	-	-	-	69	-	69
At 31 December 2015	11,749	(720)	11,029	(6,076)	-	(330)	4,623	635	11,664
<b>Financial liabilities</b>									
Derivatives	12,321	-	12,321	(11,202)	-	(734)	385	982	13,303
Repos, stock lending and similar agreements classified as:									
- trading liabilities	-	-	-	-	-	-	-	1,805	1,805
- non-trading liabilities	-	-	-	-	-	-	-	1,805	1,805
Customer accounts at amortised cost	904	(770)	134	-	-	-	134	-	134
<b>At 31 December 2016</b>	<b>13,225</b>	<b>(770)</b>	<b>12,455</b>	<b>(11,202)</b>	<b>-</b>	<b>(734)</b>	<b>519</b>	<b>2,787</b>	<b>15,242</b> <sup>3</sup>
Derivatives	9,592	-	9,592	(6,076)	-	(2,455)	1,061	396	9,988
Repos, stock lending and similar agreements classified as:									
- trading liabilities	-	-	-	-	-	-	-	2,315	2,315
- non-trading liabilities	-	-	-	-	-	-	-	2,315	2,315
Customer accounts at amortised cost	797	(720)	77	-	-	-	77	-	77
At 31 December 2015	10,389	(720)	9,669	(6,076)	-	(2,455)	1,138	2,711	12,380

**NOTES TO THE FINANCIAL STATEMENTS** *(continued)*

**53 Offsetting of financial assets and financial liabilities** *(continued)*

<sup>1</sup> *These exposures continue to be secured by financial collateral, but the Bank may not have sought or been able to obtain a legal opinion evidencing enforceability of the offsetting right.*

<sup>2</sup> *Amounts presented in the balance sheet included balances due from HSBC entities of HK\$2,574m (2015: HK\$1,293m).*

<sup>3</sup> *Amounts presented in the balance sheet included balances due to HSBC entities of HK\$3,167m (2015: HK\$3,171m).*

Financial assets and financial liabilities are offset and the net amount is reported in the balance sheet when there is a legally enforceable right to offset the recognised amounts and there is an intention to settle on a net basis, or realise the asset and settle the liability simultaneously ('the offset criteria').

The 'Amounts not set off in the balance sheet' for derivatives and reverse repurchase/repurchase, stock borrowing/lending and similar arrangements include transactions where:

- the counterparty has an offsetting exposure with the group and a master netting or similar arrangement is in place with a right of set off only in the event of default, insolvency or bankruptcy, or the offset criteria are otherwise not satisfied; and

- cash and non-cash collaterals are received and pledged in respect of the transactions described above.

## NOTES TO THE FINANCIAL STATEMENTS (continued)

### 54 Employee retirement benefits

#### (a) Defined benefit schemes

The Group operates three defined benefit schemes, the Hang Seng Bank Limited Defined Benefit Scheme ("HSBDBS"), which is the principal scheme which covers about 26 per cent of the Group's employees, and two other schemes, the Hang Seng Bank Limited Pension Scheme ("HSBPS") and the Hang Seng Bank Limited Non-contributory Terminal Benefits Scheme ("HSBNTBS"). HSBDBS was closed to new entrants with effect from 1 April 1999, and HSBPS and HSBNTBS were closed to new entrants with effect from 31 December 1986. Since the defined benefit section of the HSBDBS is a final salary lump sum scheme, its exposure to longevity risk and interest rate risk is limited.

These schemes are registered under Occupational Retirement Schemes Ordinance (Cap. 426 of the law of Hong Kong) ("the Ordinance"). These schemes are administered by trustees, with their assets held separately from those of the Group. The trustees are required by the Trust Deed to act in the best interest of the scheme participants and are responsible for setting investment policies of the schemes.

HSBDBS is predominantly a funded scheme with assets which is held under insurance policy separate from the Group. HSBDBS is reviewed at least on a triennial basis in accordance with local regulations. The actuarial assumptions used to calculate the defined benefit obligations of HSBDBS vary according to the economic conditions.

HSBDBS mainly invests in bonds and equities and each investment manager has been assigned an investment mandate with the targeted asset allocation. The ranges of target asset allocations for the portfolio are as follows: Bonds (0 – 45%), Equity (0 – 55%) and cash (0 – 100%).

#### (i) Cumulative actuarial gains/(losses) recognised in other comprehensive income in respect of defined benefit schemes

	2016	2015
At 1 January	(1,439)	(1,861)
Actuarial gains recognised in other comprehensive income	<u>127</u>	<u>422</u>
At 31 December	<u>(1,312)</u>	<u>(1,439)</u>



**NOTES TO THE FINANCIAL STATEMENTS** *(continued)*

**54 Employee retirement benefits** *(continued)*

**(a) Defined benefit schemes** *(continued)*

(ii) Movements in the scheme assets and present value of the defined benefit obligations

Net asset/(liability) under defined benefit schemes

	Fair value of scheme assets	Present value of defined benefit obligations	Net defined benefit (liability)/ asset
At 1 January 2016	4,594	(5,565)	(971)
Current service cost (note 14)	-	(202)	(202)
Net interest income/(cost) on the net defined benefit liability (note 14)	77	(92)	(15)
Remeasurement effects recognised in other comprehensive income	(104)	231	127
- Actuarial gains from changes in financial assumptions	-	496	496
- Actuarial losses from experience	(104)	(265)	(369)
Contributions by the Group	482	-	482
Benefits paid	(429)	429	-
Administrative costs and taxes paid by scheme (note 14)	(2)	-	(2)
At 31 December 2016	<u>4,618</u>	<u>(5,199)</u>	<u>(581)</u>
Retirement benefit liabilities recognised in balance sheet (included in "Other liabilities")	4,414	(5,040)	(626)
Retirement benefit assets recognised in balance sheet (included in "Other accounts" of "Other assets")	204	(159)	45
Present value of defined benefit obligation relating to:			
- Actives		(5,043)	
- Pensioners		(156)	

**NOTES TO THE FINANCIAL STATEMENTS** (continued)

**54 Employee retirement benefits** (continued)

(a) **Defined benefit schemes** (continued)

(ii) Movements in the scheme assets and present value of the defined benefit obligations (continued)

Net asset/(liability) under defined benefit schemes (continued)

	Fair value of scheme assets	Present value of defined benefit obligations	Net defined benefit (liability)/ asset
At 1 January 2015	4,582	(6,155)	(1,573)
Current service cost (note 14)	-	(232)	(232)
Net interest income/(cost) on the net defined benefit liability (note 14)	79	(104)	(25)
Remeasurement effects recognised in other comprehensive income	167	255	422
- Actuarial gains from changes in financial assumptions	-	233	233
- Actuarial gains from experience	167	22	189
Contributions by the Group	439	-	439
Benefits paid	(671)	671	-
Administrative costs and taxes paid by scheme (note 14)	(2)	-	(2)
At 31 December 2015	<u>4,594</u>	<u>(5,565)</u>	<u>(971)</u>
Retirement benefit liabilities recognised in balance sheet (included in "Other liabilities")	4,384	(5,397)	(1,013)
Retirement benefit assets recognised in balance sheet (included in "Other accounts" of "Other assets")	210	(168)	42
Present value of defined benefit obligation relating to:			
- Actives		(5,400)	
- Pensioners		(165)	

The Group expect to make HK\$184m of contributions to defined benefit schemes during 2017.

(iii) Benefits expected to be paid

Benefits expected to be paid from the HSBDBS, HSBPS and HSBNTBS to retirees over each of the next five years, and in aggregate for the five years thereafter, are as follows:

	2017	2018	2019	2020	2021	2022-2026
HSBDBS	282	424	415	453	534	2,083
HSBPS / HSBNTBS	13	13	12	12	11	46

The duration of the principal scheme HSBDBS is 7.3 years (2015: 8.0 years) under the disclosure assumptions adopted.

**NOTES TO THE FINANCIAL STATEMENTS** (continued)

**54 Employee retirement benefits** (continued)

(a) **Defined benefit schemes** (continued)

(iv) Fair value of scheme assets by asset classes

	Value	Quoted market price in active market	Of which held by the Group
<b>2016</b>			
Fair value of scheme assets			
- Equities	2,387	2,387	-
- Bonds	1,732	1,732	-
- Other*	499	499	409
	<u>4,618</u>	<u>4,618</u>	<u>409</u>
<b>2015</b>			
Fair value of scheme assets			
- Equities	2,195	2,195	-
- Bonds	1,710	1,710	-
- Other*	689	689	396
	<u>4,594</u>	<u>4,594</u>	<u>396</u>

\* Other mainly consists of cash and deposits.

(v) The Principal Scheme's actuarial financial assumptions

These schemes are funded defined benefit schemes and are administered by trustees with assets held separately from those of the Group. The latest annual actuarial valuations at 31 December 2016 were performed by Billy Wong, Fellow of the Society of Actuaries of the United States, of Mercer (Hong Kong) Limited, using the Attained Age Method.

The Ordinance requires that registered retirement benefit schemes shall at all time be fully funded to meet its aggregate vested liability (i.e. on a wind-up basis) in accordance with the recommendations contained in an actuarial certificate supplied under the Ordinance. Any shortfall must be made up within the specified time under the Ordinance. Any deficits to meet the aggregate past service liability (i.e. on an on-going basis) can however be eliminated over a period of time in accordance with the funding recommendations of an actuary.

On an on-going basis, the value of the principal scheme assets of HSBDBS represented 101 per cent (2015: 99 per cent) of the benefits accrued to scheme members, after allowing for expected future increases in salaries, and the resulting surplus amounted to HK\$44m (deficit in 2015: HK\$66m). On a wind-up basis, the actuarial value of the HSBDBS assets represented 102 per cent (2015: 101 per cent) of the members' vested benefits, based on salaries at that date, and the resulting surplus amounted to HK\$75m (surplus in 2015: HK\$39m).

The determinations for actuarial funding valuation purposes are based on different methods and assumptions from those used for financial reporting purposes, and as a result should neither be compared nor related to other determinations included in these financial statements.

## NOTES TO THE FINANCIAL STATEMENTS (continued)

### 54 Employee retirement benefits (continued)

#### (a) Defined benefit schemes (continued)

##### (v) The Principal Scheme's actuarial financial assumptions (continued)

The present value of the principal scheme's obligation was a final lump sum salary of HK\$5,040m (2015: HK\$5,397m). The principal actuarial assumptions used to calculate the Group's obligations for the HSBDBS for each year, and used as the basis for measuring the expenses in relation to the scheme, were as follows:

#### Principal actuarial assumptions for the principal scheme

	HSBDBS %
<b>2016</b>	
Discount rate	1.85
Expected rate of salary increases	2.80
of which:	
- 2017	2.80
- thereafter	2.80
<b>2015</b>	
Discount rate	1.70
Expected rate of salary increases	3.80
of which:	
- 2016	3.80
- thereafter	3.80

The Group determines the discount rates to be applied to its obligations in consultation with the schemes' actuaries, on the basis of current average yields of high quality (AA rated or equivalent) debt instruments, with maturities consistent with those of the defined benefit obligations. Where there is not a deep market in corporate bonds, government bond yields have been used, and this is the case for HSBDBS. The yield curve has been extrapolated where the term of the liabilities is longer than the duration of available bonds and the discount rate used then takes into account the term of the liabilities and the shape of the yield curve.

##### (vi) Actuarial assumption sensitivities

The discount rate and rate of pay increase are sensitive to changes in market conditions arising during the reporting year. The following table shows the effect of changes in these on the HSBDBS:

#### The effect of changes in key assumptions:

	HSBDBS	
	2016	2015
Discount rate		
- change in retirement benefit obligation at year end from a 25bps increase	(89)	(104)
- change in retirement benefit obligation at year end from a 25bps decrease	92	108
- change in 2017/2016 retirement benefit cost from a 25bps increase	(4)	(4)
- change in 2017/2016 retirement benefit cost from a 25bps decrease	3	3
Rate of pay increase		
- change in retirement benefit obligation at year end from a 25bps increase	101	105
- change in retirement benefit obligation at year end from a 25bps decrease	(98)	(103)
- change in 2017/2016 retirement benefit cost from a 25bps increase	6	6
- change in 2017/2016 retirement benefit cost from a 25bps decrease	(6)	(6)

## NOTES TO THE FINANCIAL STATEMENTS (continued)

### 54 Employee retirement benefits (continued)

#### (b) Defined contribution schemes

The principal defined contribution scheme for Group employees joining on or after 1 April 1999 is the HSBC Group Hong Kong Local Staff Defined Contribution Scheme. The Group also operates two other defined contribution schemes, the Hang Seng Bank Provident Fund Scheme which was closed to new entrants since 31 December 1986 and the Hang Seng Insurance Company Limited Employees' Provident Fund. The Bank and relevant Group entities also participated in mandatory provident fund schemes ("MPF schemes") registered under the Hong Kong Mandatory Provident Fund Ordinance, which are also defined contribution schemes.

Contributions made in accordance with the relevant scheme rules to these defined contribution schemes (including MPF schemes) are charged to the income statement as below:

	2016	2015
Amounts charged to the income statement (note 14)	<u>194</u>	<u>186</u>

Under the schemes, the Group's contributions are reduced by contributions forfeited by those employees who leave the schemes prior to the contributions vesting fully. The forfeited contributions utilised during the year or available at the year-end to reduce future contributions is HK\$0.5m (2015: HK\$2m).

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### 55 Share-based payments

The Group participated in various share compensation plans as listed in the following tables that are operated by the HSBC Group for acquiring of HSBC Holdings plc shares. These are to be settled by the delivery of shares of HSBC Holdings plc.

#### Share awards and option plans

<u>Award</u>	<u>Policy</u>	<u>Purpose</u>
Restricted Share Awards (including Group Performance Share Plan)	<ul style="list-style-type: none"><li>- Vesting of awards generally subject to continued employment with the Group</li><li>- Vesting often staggered over three years</li><li>- Certain shares subject to a retention requirement post-vesting</li><li>- Awards generally not subject to performance conditions</li><li>- Awards granted from 2010 onwards are subject to clawback provision prior to vesting</li></ul>	<ul style="list-style-type: none"><li>- Rewards employee performance, potential and retention of key employees</li><li>- To defer variable pay and deferral provides an incentive for a longer-term commitment</li></ul>
International Employee Share Purchase Plan	<ul style="list-style-type: none"><li>- A new broad-based employee plan which was first offered to eligible employees in Hong Kong in September 2013</li><li>- Eligible employees make contributions up to the local equivalent of £250 per month which are applied in the purchase of shares on a quarterly basis. For every three shares purchased, the employee is granted a matching award by the HSBC Group of</li><li>- The matching award vests subject to continued employment with the Group and retention of the purchased shares in the plan until the third anniversary of the start of the relevant plan year</li></ul>	<ul style="list-style-type: none"><li>- To align the interests of all employees with the creation of shareholder value</li></ul>
Savings-related share option plan	<ul style="list-style-type: none"><li>- Eligible employees save up to £250 per month (or its equivalent in Hong Kong dollars), with the option to use the savings to acquire shares. The last grant of options under this plan was in</li><li>- Exercisable within six months following either the third or fifth anniversaries of the commencement of three-year or five-year contracts, respectively</li><li>- The exercise price is set at a 20% (2015: 20%) discount to the market value immediately preceding the date of invitation</li></ul>	<ul style="list-style-type: none"><li>- To align the interests of all employees with the creation of shareholder value</li></ul>

**NOTES TO THE FINANCIAL STATEMENTS** (continued)

**55 Share-based payments** (continued)

**(a) Savings-related share option plan**

The number of options, weighted average exercise price, and the weighted average remaining contractual life for options outstanding at the balance sheet date, are as follows:

Option scheme with exercise price set in Hong Kong dollars

	2016		2015	
	Weighted average exercise price HK\$	Number ('000)	Weighted average exercise price HK\$	Number ('000)
Outstanding at 1 January	56.60	194	55.49	1,363
Exercised in the year	55.47	(10)	55.64	(1,155)
Less: Cancellation/ Lapsed in the year	56.60	(105)	55.49	(14)
Outstanding at 31 December	55.47	79	56.60	194
Exercisable at 31 December	-	-	-	-

The weighted average share price at the date of exercise for share options exercised during the year was HK\$54.43 (2015: HK\$66.65).

The options outstanding at the year end of 2016 had an exercise price of HK\$55.47 (2015: HK\$55.47 to HK\$63.99), and a weighted average remaining contractual life of 1.08 years (2015: 1.20 years).

No share option was granted during 2016 and 2015.

**(b) HSBC share awards**

	2016 Number ('000)	2015 Number ('000)
Outstanding at 1 January	886	357
Additions during the year	808	881
Less: Released/ lapsed in the year	(563)	(352)
Outstanding at 31 December	1,131	886

The closing price of the HSBC Holdings plc share at 31 December 2016 was £6.57 (2015: £5.36).

The weighted average remaining vesting period as at 31 December 2016 was 0.64 years (2015: 0.65 years).

**(c) Calculation of fair value**

The fair values of share options at the date of grant of the options are calculated using a Black-Scholes model. The fair value of a share award is based on the share price at the date of the grant.

**(d) Income statement charge**

	2016	2015
Restricted share awards	17	24
Savings-related share awards and option plans	12	14
Income statement charge (note 14)	29	38
Equity-settled share-based payments	29	38
Cash-settled share-based payments	-	-
	29	38

The above charge was computed from the fair values of the share-based payment transaction when contracted, that arose under employee share awards made in accordance with HSBC's reward structures.

## NOTES TO THE FINANCIAL STATEMENTS (continued)

### 56 Material related-party transactions

#### (a) Immediate holding company and its subsidiaries, fellow subsidiary companies, subsidiaries and associates

In 2016, the Group entered into transactions with its immediate holding company, its subsidiaries and fellow subsidiary companies in the ordinary course of its interbank activities mainly including lending activities, acceptance and placement of interbank deposits, correspondent banking transactions, off-balance sheet transactions and the provision of other banking and financial services. The activities were on substantially the same terms, including interest rates and security, as for comparable transactions with third party counterparties.

The Group used the IT service of, and shared an automated teller machine network with, its immediate holding company. The Group also shared certain IT projects with and used certain processing services of fellow subsidiaries on a cost recovery basis. The Group maintained a staff retirement benefit scheme for which a fellow subsidiary company acts as insurer and administrator. A fellow subsidiary company was appointed as fund manager to manage the Group's life insurance investment portfolios. The Bank acted as agent for the marketing of Mandatory Provident Fund products and the distribution of retail investment funds for two fellow subsidiary companies.

There was an arrangement whereby a fellow subsidiary provided certain management services to Hang Seng Insurance Company Limited. The fees on these transactions are determined on an arm's length basis.

During 2016, the Bank has paid coupon on AT1 capital instrument of HK\$346m to its immediate holding company (2015: HK\$310m).

The aggregate amount of income and expenses arising from these transactions during the year, the balances of amounts due to and from the relevant related parties, and the total contract sum of off-balance sheet transactions at the year-end are as follows:

	Immediate holding company and its subsidiaries		Fellow subsidiaries		Associates <sup>#</sup>	
	2016	2015	2016	2015	2016	2015
Interest income	73	66	8	11	12	106
Interest expense	(232)	(268)	-	-	(1)	(4)
Other operating income	73	57	(6)	(9)	-	-
Operating expenses*	(674)	(726)	(871)	(824)	(30)	(36)
<b>Amounts due from:</b>						
Placings with and advances to banks	17,608	15,913	1,017	7,840	3,470	2,567
Financial assets designated at fair value	-	-	-	-	-	-
Derivative financial instruments	2,420	1,204	154	88	-	-
Loans and advances to customers	-	-	-	-	233	233
Financial investments	-	-	-	-	-	-
Other assets	297	28	9	9	6	6
	<b>20,325</b>	<b>17,145</b>	<b>1,180</b>	<b>7,937</b>	<b>3,709</b>	<b>2,806</b>
<b>Amounts due to:</b>						
Current, savings and other deposit accounts	1,432	1,468	-	-	669	229
Deposits from banks	7,785	10,190	-	41	76	71
Repurchase agreements - non-trading	766	-	-	-	-	-
Derivative financial instruments	2,338	1,150	829	2,021	-	-
Certificates of deposit and other debt securities in issue	4,000	4,000	-	-	-	-
Subordinated liabilities	2,327	2,325	-	-	-	-
Other liabilities	499	333	176	163	-	-
	<b>19,147</b>	<b>19,466</b>	<b>1,005</b>	<b>2,225</b>	<b>745</b>	<b>300</b>
<b>Derivative contracts:</b>						
Contract amount	207,553	141,308	35,124	56,936	-	-

\* 2016 operating expenses included payment of HK\$64m (2015: HK\$107m) of software costs which were capitalised as intangible assets in the balance sheet of the Group.

# Representing associates in HSBC Group.

## NOTES TO THE FINANCIAL STATEMENTS (continued)

### 56 Material related-party transactions (continued)

#### (b) Key management personnel remuneration

Key management personnel are those persons having authority and responsibility for planning, directing and controlling the activities of the Group and Bank. It includes members of the Board of Directors and Executive Committee of the Bank. During the year, the members of the Bank's Executive Committee has increased from 13 to 14. The amount of remuneration paid to key management personnel was pro-rata from the date of being appointed as Directors of the Bank or members of Executive Committee, if any. The aggregate amount of remuneration of the key management personnel during the year are as follows:-

	2016	2015
Salaries, allowances and benefits in kind	60	43
Retirement scheme contributions	4	2
Variable bonuses	37	35
	<u>101</u>	<u>80</u>

#### (c) Material transactions with key management personnel

During the year, the Group provided credit facilities to and accepted deposits from key management personnel of the Bank and its holding companies, their close family members and companies controlled or significantly influenced by them. The credit facilities extended and deposit taken were provided in the ordinary course of business and on substantially the same terms as for comparable transactions with persons of a similar standing or, where applicable, with other employees.

Material transactions conducted with key management personnel of the Bank and its holding companies and parties related to them are as follows:

	2016	2015
<i>For the year</i>		
Interest income	413	387
Interest expense	46	53
Fees and commission income	39	37
Maximum aggregate amount of loans and advances	17,048	18,293
<i>At the year-end</i>		
Loans and advances	13,971	14,901
Deposits	9,459	10,797
Guarantees issued	69	44
Undrawn commitments	2,350	2,664

The Group adheres to section 83 of the Hong Kong Banking Ordinance regarding lending to related parties; this includes unsecured lending to key management personnel, their relatives and companies that may be directly or indirectly influenced or controlled by such individuals.

No impairment losses have been recorded against balances outstanding during the year with key management personnel, and there are no specific impairment allowances on balances with key management personnel at the year-end.



## NOTES TO THE FINANCIAL STATEMENTS (continued)

### 56 Material related-party transactions (continued)

#### (d) Loans to Directors

Particulars of loans to directors disclosed pursuant to section 17 of the Hong Kong Companies Ordinance (Cap.622G) (Disclosure of Information about Benefits of Directors) for the year ended 31 December 2016 are shown as below.

	2016	2015
Aggregate amount of relevant transactions outstanding at 31 December		
- Loans and advances	12,966	14,017
- Guarantees issued	<u>69</u>	<u>44</u>
Maximum aggregate amount of relevant transactions during the year		
- Loans and advances	15,534	16,602
- Guarantees issued	<u>76</u>	<u>67</u>

The above relevant transactions in 2016 were all transacted by the Bank and nil by the Bank's subsidiaries.

#### (e) Directors' material interests in transactions, arrangements or contracts

No transaction, arrangement or contract (that is significant in relation to the Bank's business), to which the Bank or any of its holding companies or any of its subsidiaries or fellow subsidiaries was a party and in which a Director of the Bank had, directly or indirectly, a material interest, subsisted as at the end of the year or at any time during the year.

#### (f) Associates

Information relating to associates and transactions with associates can be found in notes 35 and 56(a).

The Group maintains a shareholders' loan to an associate. The shareholders' loan is unsecured, interest free and with no fixed term of repayment. The balance at 31 December 2016 was HK\$233m (2015: HK\$233m).

#### (g) Ultimate holding company

The Group participates in various share option and share plans operated by HSBC Holdings plc whereby share options or shares of HSBC Holdings plc are granted to employees of the Group. As disclosed in note 55, the Group recognises an expense in respect of these share options and share awards. The cost borne by the ultimate holding company in respect of these share options and share awards is treated as a capital contribution and is recorded under "Other reserves". The balance of this reserve as at 31 December 2016 amounted to HK\$657m comprising HK\$668m relating to share option schemes and negative reserve amounted to HK\$11m relating to share award schemes (2015: HK\$672m comprising HK\$668m relating to share option schemes and HK\$4m relating to share award schemes).

#### (h) Employee retirement benefits

At 31 December 2016, defined benefit scheme assets amounted to HK\$3,374m (2015: HK\$3,471m) was under management by the Bank's subsidiary company and the related fee paid was HK\$7m (2015: HK\$7m).

## NOTES TO THE FINANCIAL STATEMENTS (continued)

### 57 Fair value of financial instruments

#### (a) Fair value of financial instruments carried at fair value

Fair value is the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. The following tables set out the financial instruments carried at fair value.

	Valuation techniques			Third party total	Amounts with HSBC entities *	Total
	Quoted market price Level 1	Using observable inputs Level 2	With significant unobservable inputs Level 3			
<b>Recurring fair value measurements</b>						
<b>2016</b>						
<b>Assets</b>						
Trading assets	37,407	7,020	-	44,427	-	44,427
Financial assets designated at fair value	5,655	2,141	727	8,523	-	8,523
Derivative financial instruments	453	13,636	32	14,121	2,574	16,695
Available-for-sale financial investments	212,522	97,493	1,222	311,237	-	311,237
<b>Liabilities</b>						
Trading liabilities	36,856	31,189	79	68,124	-	68,124
Financial liabilities designated at fair value	-	3,991	-	3,991	-	3,991
Derivative financial instruments	48	10,042	46	10,136	3,167	13,303
<b>2015</b>						
<b>Assets</b>						
Trading assets	34,513	5,860	-	40,373	-	40,373
Financial assets designated at fair value	3,330	4,026	547	7,903	-	7,903
Derivative financial instruments	494	9,796	13	10,303	1,292	11,595
Available-for-sale financial investments	197,686	91,603	1,161	290,450	-	290,450
<b>Liabilities</b>						
Trading liabilities	33,062	29,828	27	62,917	-	62,917
Financial liabilities designated at fair value	-	3,994	-	3,994	-	3,994
Derivative financial instruments	44	6,770	3	6,817	3,171	9,988

\* Included structured instruments and derivative contracts transacted with HSBC entities which were mainly classified within Level 2 of the valuation hierarchy.

Transfers between levels of the fair value hierarchy are deemed to occur at the end of the reporting period.

There were no material transfers between Level 1 and Level 2 during the year.

#### Control framework

Fair values are subject to a control framework designed to ensure that they are either determined or validated by a function independent of the risk-taker.

For all financial instruments where fair values are determined by reference to externally quoted prices or observable pricing inputs to models, independent price determination or validation is utilised. In inactive markets, direct observation of a traded price may not be possible. In these circumstances, the Group will source alternative market information to validate the financial instrument's fair value, with greater weight given to information that is considered to be more relevant and reliable. The factors that are considered in this regard are, inter alia:

- the extent to which prices may be expected to represent genuine traded or tradable prices;
- the degree of similarity between financial instruments;
- the degree of consistency between different sources;
- the process followed by the pricing provider to derive the data;
- the elapsed time between the date to which the market data relates and the balance sheet date; and
- the manner in which the data was sourced.

For fair values determined using a valuation model, the control framework may include, as applicable, development or validation by independent support functions of (i) the logic within valuation models; (ii) the inputs to those models; (iii) any adjustments required outside the valuation models; and (iv) where possible, model outputs. Valuation models are subject to a process of due diligence and calibration before becoming operational and are calibrated against external market data on an ongoing basis.

## NOTES TO THE FINANCIAL STATEMENTS *(continued)*

### 57 Fair value of financial instruments *(continued)*

#### (a) Fair value of financial instruments carried at fair value *(continued)*

To this end, ultimate responsibility for the determination of fair values lies with Finance. Finance establishes the accounting policies and procedures governing valuation, and is responsible for ensuring compliance with all relevant accounting standards.

#### *Determination of fair value*

Fair values are determined according to the following hierarchy:

##### (i) Level 1: Quoted market price

Financial instruments with quoted prices for identical instruments in active markets that the Group can assess at the measurement date.

##### (ii) Level 2: Valuation technique using observable inputs

Financial instruments with quoted prices for similar instruments in active markets or quoted prices for identical or similar instruments in inactive markets and financial instruments valued using models where all significant inputs are observable.

##### (iii) Level 3: Valuation technique with significant unobservable inputs

Financial instruments valued using models where one or more significant inputs are unobservable.

The judgement as to whether a market is active may include, but is not restricted to, the consideration of factors such as the magnitude and frequency of trading activity, the availability of prices and the size of bid/offer spreads. The bid/offer spread represents the difference in prices at which a market participant would be willing to buy compared with the price at which they would be willing to sell. In inactive markets, obtaining assurance that the transaction price provides evidence of fair value or determining the adjustments to transaction prices that are necessary to measure the fair value of the instrument requires additional work during the valuation process.

Valuation techniques incorporate assumptions about factors that other market participants would use in their valuations. A range of valuation techniques is employed, dependent upon the instrument type and available market data. Most valuation techniques are based upon discounted cash flow analysis, in which expected future cash flows are calculated and discounted to present value using a discounting curve. Prior to consideration of credit risk, the expected future cash flows may be known, as would be the case for the fixed leg of an interest rate swap, or may be uncertain and require projection, as would be the case for the floating leg of an interest rate swap. Projection utilises market forward curves, if available. In option models, the probability of different potential future outcomes must be considered. In addition, the value of some products are dependent upon more than one market factor, and in these cases it will typically be necessary to consider how movements in one market factor may impact the other market factors. The model inputs necessary to perform such calculations include interest rate yield curves, exchange rates, volatilities, correlations, prepayment and default rates.

The majority of valuation techniques employ only observable market data. However, certain financial instruments are valued on the basis of valuation techniques that feature one or more significant market inputs that are unobservable, and for them the measurement of fair value is more judgemental. An instrument in its entirety is classified as valued using significant unobservable inputs if, in the opinion of management, a significant proportion of the instrument's inception profit ("day 1 gain or loss") or greater than 5% of the instrument's carrying value is driven by unobservable inputs. "Unobservable" in this context means that there is little or no current market data available from which to determine the price at which an arm's length transaction would be likely to occur. It generally does not mean that there is no market data available at all upon which to base a determination of fair value (consensus pricing data may, for example, be used). All fair value adjustments are included within the levelling determination.

## NOTES TO THE FINANCIAL STATEMENTS (continued)

### 57 Fair value of financial instruments (continued)

#### (a) Fair value of financial instruments carried at fair value (continued)

##### *Determination of fair value (continued)*

The types of financial instruments carried at fair values are as follows:

##### - Debt securities, Treasury and eligible bills, and Equities

These instruments are valued based on quoted market prices from an exchange, dealer, broker, industry group or pricing service provider, where available. Where unavailable, fair value is determined by reference to quoted market prices for similar instruments, or in the case of certain unquoted equities, valuation techniques using inputs derived from observable and unobservable market data.

##### - Structured notes

The fair value of structured notes valued using a valuation technique is derived from the fair value of the underlying debt security, and the fair value of the embedded derivative is determined as described in the paragraph below on derivatives.

Trading liabilities valued using a valuation technique with significant unobservable inputs principally comprised equity-linked structured notes, which are issued by the Group and provide the counterparty with a return that is linked to the performance of certain equity securities, and other portfolios. The notes are classified as level 3 due to the unobservability of parameters such as long-dated equity volatilities and correlations between equity prices, between equity prices and interest rates and between interest rates and foreign exchange rates.

##### - Derivatives

OTC (i.e. non-exchange traded) derivatives are valued using valuation models. Valuation models calculate the present value of expected future cash flows, based upon "no-arbitrage" principles. For many vanilla derivative products, such as interest rate swaps and European options, the modelling approaches used are standard across the industry. For more complex derivative products, there may be some discrepancies in practice. Inputs to valuation models are determined from observable market data wherever possible, including prices available from exchanges, dealers, brokers or providers of consensus pricing. Certain inputs may not be observable in the market directly, but can be determined from observable prices via model calibration procedures. Finally, some inputs are not observable, but can generally be estimated from historical data or other sources.

Examples of inputs that are generally observable include foreign exchange spot and forward rates, benchmark interest rate curves and volatility surfaces for commonly traded option products. Examples of inputs that may be unobservable include volatility surfaces, in whole or in part, for less commonly traded option products, and correlations between market factors, such as foreign exchange rates, interest rates and equity prices.

#### **Fair value adjustments**

Fair value adjustments are adopted when the Group considers that there are additional factors that would be considered by a market participant that are not incorporated within the valuation model. Movements in the level of fair value adjustments do not necessarily result in the recognition of profits or losses within the income statement. For example, as models are enhanced, fair value adjustments may no longer be required.

##### *Risk-related adjustments*

##### - Bid-offer

HKFRS 13 requires use of the price within the bid-offer spread that is most representative of fair value. Valuation models will typically generate mid-market values. The bid-offer adjustment reflects the extent to which bid-offer cost would be incurred if substantially all residual net portfolio market risks were closed using available hedging instruments or by disposing of or unwinding the position.

##### - Uncertainty

Certain model inputs may be less readily determinable from market data, and/or the choice of model itself may be more subjective. In these circumstances, an adjustment may be necessary to reflect the likelihood that market participants would adopt more conservative values for uncertain parameters and/or model assumptions than those used in the Group's valuation model.

##### - Credit valuation adjustment

The credit valuation adjustment is an adjustment to the valuation of OTC derivative contracts to reflect within fair value the possibility that the counterparty may default and that the Group may not receive the full market value of the transactions.

##### - Debit valuation adjustment

The debit valuation adjustment is an adjustment to the valuation of OTC derivative contracts to reflect within fair value the possibility that the Group may default, and that the Group may not pay full market value of the transactions.

##### - Funding fair value adjustment

The funding fair value adjustment is calculated by applying future market funding spreads to the expected future funding exposure of any uncollateralised component of the OTC derivative portfolio. The expected future funding exposure is calculated by a simulation methodology, where available and is adjusted for events that may terminate the exposure such as the default of the Group or the counterparty. The funding fair value adjustment and debit valuation adjustment are calculated independently.

**NOTES TO THE FINANCIAL STATEMENTS** (continued)

**57 Fair value of financial instruments** (continued)

**(a) Fair value of financial instruments carried at fair value** (continued)

*Model-related adjustments*

- Model limitation

Models used for portfolio valuation purposes may be based upon a simplifying set of assumptions that do not capture all material market characteristics. In these circumstances, model limitation adjustments are adopted.

- Inception profit (Day 1 P&L reserves)

Inception profit adjustments are adopted where the fair value estimated by a valuation model is based on one or more significant unobservable inputs.

*Financial instruments measured at fair value using a valuation technique with significant unobservable inputs - Level 3*

	Assets				Liabilities			
	Available-for-sale	Held for trading	Designated at fair value through profit or loss	Derivatives	Held for trading	Designated at fair value through profit or loss	Derivatives	
<b>2016</b>								
Private equity	1,222	-	727	-	-	-	-	
Structured notes	-	-	-	-	79	-	-	
Derivatives	-	-	-	32	-	-	46	
	<u>1,222</u>	<u>-</u>	<u>727</u>	<u>32</u>	<u>79</u>	<u>-</u>	<u>46</u>	
<b>2015</b>								
Private equity	1,161	-	547	-	-	-	-	
Structured notes	-	-	-	-	27	-	-	
Derivatives	-	-	-	13	-	-	3	
	<u>1,161</u>	<u>-</u>	<u>547</u>	<u>13</u>	<u>27</u>	<u>-</u>	<u>3</u>	

NOTES TO THE FINANCIAL STATEMENTS (continued)

57 Fair value of financial instruments (continued)

(a) Fair value of financial instruments carried at fair value (continued)

Movement in Level 3 financial instruments

	Assets				Liabilities		
	Available-for-sale	Held for trading	Designated at fair value through profit or loss	Derivatives	Held for trading	Designated at fair value through profit or loss	Derivatives
At 1 January 2016	1,161	-	547	13	27	-	3
Total gains or losses recognised in profit or loss							
- trading income	-	-	-	20	(3)	-	43
- net income from other financial instruments designated at fair value	-	-	34	-	-	-	-
- gains less losses from financial investments	-	-	-	-	-	-	-
Total gains or losses recognised in other comprehensive income							
- fair value gains	61	-	-	-	-	-	-
- exchange differences	-	-	-	-	-	-	-
Purchases	-	-	458	-	-	-	-
Issues/ deposit taking	-	-	-	-	225	-	-
Sales	-	-	-	-	-	-	-
Settlements	-	-	(312)	-	(169)	-	-
Transfers out	-	-	-	(1)	(1)	-	-
Transfers in	-	-	-	-	-	-	-
At 31 December 2016	1,222	-	727	32	79	-	46
Unrealised gains or losses recognised in profit or loss relating to those assets and liabilities held at the end of the reporting period							
- trading income	-	-	-	32	3	-	(46)
- net income from other financial instruments designated at fair value	-	-	34	-	-	-	-

NOTES TO THE FINANCIAL STATEMENTS (continued)

57 Fair value of financial instruments (continued)

(a) Fair value of financial instruments carried at fair value (continued)

Movement in Level 3 financial instruments (continued)

	Assets				Liabilities			
	Available-for-sale	Held for trading	Designated at fair value through profit or loss	Derivatives	Held for trading	Designated at fair value through profit or loss	Derivatives	
At 1 January 2015	1,234	-	701	32	89	-	1	
Total gains or losses recognised in profit or loss								
- trading income	-	-	-	11	-	-	2	
- net income from other financial instruments designated at fair value	-	-	53	-	-	-	-	
- gains less losses from financial investments	-	-	-	-	-	-	-	
Total gains or losses recognised in other comprehensive income								
- fair value gains	(73)	-	-	-	-	-	-	
- exchange differences	-	-	-	-	-	-	-	
Purchases	-	-	198	-	-	-	-	
Issues/ deposit taking	-	-	-	-	78	-	-	
Sales	-	-	(31)	-	-	-	-	
Settlements	-	-	(188)	-	(122)	-	-	
Transfers out	-	-	(186)	(30)	(18)	-	-	
Transfers in	-	-	-	-	-	-	-	
At 31 December 2015	<u>1,161</u>	<u>-</u>	<u>547</u>	<u>13</u>	<u>27</u>	<u>-</u>	<u>3</u>	
Unrealised gains or losses recognised in profit or loss relating to those assets and liabilities held at the end of the reporting period								
- trading income	-	-	-	3	-	-	(3)	
- net income from other financial instruments designated at fair value	-	-	51	-	-	-	-	

In 2016, the transfer out of Level 3 derivative assets was predominantly resulted from increase in observability in equity volatilities. In respect of the held for trading liabilities, the transfer out of level 3 reflected the change in observability of correlations between equity and equity index used for pricing the instrument.

**NOTES TO THE FINANCIAL STATEMENTS** (continued)

**57 Fair value of financial instruments** (continued)

**(a) Fair value of financial instruments carried at fair value** (continued)

**Effect of changes in significant unobservable assumptions to reasonably possible alternatives**

As discussed above, the fair value of financial instruments are, in certain circumstances, measured using valuation techniques that incorporate assumptions which are not evidenced by prices from observable current market transactions in the same instrument and are not based on observable market data.

*Sensitivity of fair values to reasonably possible alternative assumptions*

	<u>Reflected in profit or loss</u>		<u>Reflected in other comprehensive income</u>	
	<u>Favourable changes</u>	<u>Unfavourable changes</u>	<u>Favourable changes</u>	<u>Unfavourable changes</u>
<b>2016</b>				
Private equity	36	(36)	49	(49)
Structured notes	-	-	-	-
Derivatives	-	-	-	-
	<u>36</u>	<u>(36)</u>	<u>49</u>	<u>(49)</u>
<b>2015</b>				
Private equity	27	(27)	74	(74)
Structured notes	-	-	-	-
Derivatives	1	(1)	-	-
	<u>28</u>	<u>(28)</u>	<u>74</u>	<u>(74)</u>

When the fair value of a financial instrument is affected by more than one unobservable assumption, the above table reflects the most favourable or the most unfavourable change from varying the assumptions individually.

For private equity, favourable and unfavourable changes are determined on the basis of 5% changes (2015: 5%) in the value of the instrument as a result of varying the levels of the unobservable parameters using statistical techniques. When parameters are not amendable to statistical analysis, quantification of uncertainty is judgemental.



NOTES TO THE FINANCIAL STATEMENTS (continued)

57 Fair value of financial instruments (continued)

(a) Fair value of financial instruments carried at fair value (continued)

Quantitative information about significant unobservable inputs in Level 3 valuations

	Fair value at 31 December 2016	Valuation technique(s)	Unobservable input(s)	Range
<b>Assets</b>				
Private equity	1,949	Net asset value Market-comparable approach	N/A Earnings Multiple P/B ratios Liquidity Discount	N/A 22 - 28 0.69 - 2.55 10% - 30%
Derivatives	32	Option model	Equity Volatility FX Volatility	24.35% - 34.83% 10.19% - 16.09%
<b>Liabilities</b>				
Structured notes	79	Option model	FX Volatility Equity and Equity Index Correlation	10.24% - 14.76% 0.178 - 0.178
Derivatives	46	Option model	Equity Volatility FX Volatility	24.35% - 34.83% 8.56% - 16.09%
	Fair value at 31 December 2015	Valuation technique(s)	Unobservable input(s)	Range
<b>Assets</b>				
Private equity	1,708	Net asset value Market-comparable approach	N/A Earnings Multiple P/B ratios Liquidity Discount	N/A 27 - 37 0.89 - 1.58 10% - 30%
Derivatives	10	Option model	Equity Volatility FX Volatility	33.11% - 52.46% 6.44% - 13.80%
	3	Discounted cash flow model	IR Curve	1.76% - 5.46%
<b>Liabilities</b>				
Structured notes	27	Option model	FX Volatility Equity and Equity Index Correlation	7.10% - 13.80% 0.256 - 0.256
Derivatives	1	Option model	FX Volatility	6.44% - 13.80%
	2	Discounted cash flow model	IR Curve	1.76% - 5.46%

## NOTES TO THE FINANCIAL STATEMENTS *(continued)*

### 57 Fair value of financial instruments *(continued)*

#### (a) Fair value of financial instruments carried at fair value *(continued)*

##### Key unobservable inputs to Level 3 financial instruments

The table above lists the key unobservable inputs to Level 3 financial instruments, and provides the range of those inputs as at 31 December 2016. A further description of the categories of key unobservable inputs is given below.

##### Private equity

The Group's private equity includes investment funds and unlisted equity shares, which are classified as designated at fair value through profit or loss or available-for-sale and are not traded in active markets. In the absence of an active market, the investment's fair value is estimated on the basis of an analysis of the investee's financial position and results, risk profile, prospects and other factors, as well as by reference to market valuations for similar entities quoted in an active market, or the price at which similar companies have changed ownership.

Investment funds are valued using their net asset value. Higher net asset value results in higher fair value, and vice versa. Given the bespoke nature of the analysis, it is not practical to quote a range of key observable inputs.

For unlisted available-for-sale equity shares, the fair values are determined with reference to multiples of comparable listed companies, such as price/earning or price/book ratios of comparables, adjusted for a liquidity discount to reflect the fact that the shares are not actively traded. An increase in the ratio in isolation will result in favourable movement in the fair values, while an increase in liquidity discount in isolation will result in unfavourable movement.

##### Volatility

Volatility is a measure of the anticipated future variability of a market price. Volatility tends to increase in stressed market conditions, and decrease in calmer market conditions. Volatility is an important input in the pricing of options. In general, the higher the volatility, the more expensive the option will be. This reflects both the higher probability of an increased return from the option, and the potentially higher costs that the Group may incur in hedging the risks associated with the option. If option prices become more expensive, this will increase the value of the Group's long option positions (i.e. the positions in which the Group has purchased options), while the Group's short option positions (i.e. the positions in which the Group has sold options) will suffer losses.

Volatility varies by underlying reference market price, and by strike and maturity of the option. Volatility also varies over time. As a result, it is difficult to make general statements regarding volatility levels.

Certain volatilities, typically those of a longer-dated nature, are unobservable. The unobservable volatility is then estimated from observable data.

The range of unobservable volatilities quoted in the table reflects the wide variation in volatility inputs by reference to market price. For any single unobservable volatility, the uncertainty in the volatility determination is significantly less than the range quoted above.

##### Correlation

Correlation is a measure of the inter-relationship between two market prices. Correlation is a number between minus one and one. A positive correlation implies that the two market prices tend to move in the same direction, with a correlation of one implying that they always move in the same direction. A negative correlation implies that the two market prices tend to move in opposite directions, with a correlation of minus one implying that the two market prices always move in opposite directions.

Correlation is used to value more complex instruments where the payout is dependent upon more than one market price. Correlation may be unobservable. Unobservable correlations may be estimated based upon a range of evidence, including consensus pricing services, the Group's trade prices, proxy correlations and examination of historical price relationships.

The range of unobservable correlations quoted in the table reflects the wide variation in correlation inputs by market price pair. For any single unobservable correlation, the uncertainty in the correlation determination is likely to be less than the range quoted above.

NOTES TO THE FINANCIAL STATEMENTS (continued)

57 Fair value of financial instruments (continued)

(b) Fair value of financial instruments not carried at fair value

The following table provides an analysis of the fair value of financial instruments not measured at fair value on the balance sheet. For all other instruments, the fair value is equal to the carrying value.

	Carrying amount	Quoted market price Level 1	Using observable inputs Level 2	With significant unobservable inputs Level 3	Fair value
<b>2016</b>					
<b>Financial Assets</b>					
Placings with and advances to banks	103,460	-	103,441	-	103,441
Loans and advances to customers	698,992	-	975	696,428	697,403
Held-to-maturity debt securities	86,900	494	86,881	-	87,375
<b>Financial Liabilities</b>					
Current, savings and other deposit accounts	989,539	-	989,629	-	989,629
Repurchase agreements – non-trading	1,805	-	1,805	-	1,805
Deposits from banks	14,075	-	14,075	-	14,075
Certificates of deposit and other debt securities in issue	5,116	-	5,130	-	5,130
Subordinated liabilities	2,327	-	2,828	-	2,828
<b>2015</b>					
<b>Financial Assets</b>					
Placings with and advances to banks	123,990	-	124,316	-	124,316
Loans and advances to customers	688,946	-	1,830	688,418	690,248
Held-to-maturity debt securities	81,822	491	84,080	-	84,571
<b>Financial Liabilities</b>					
Current, savings and other deposit accounts	959,228	-	959,216	-	959,216
Repurchase agreements – non-trading	2,315	-	2,315	-	2,315
Deposits from banks	18,780	-	18,780	-	18,780
Certificates of deposit and other debt securities in issue	5,191	-	5,223	-	5,223
Subordinated liabilities	2,325	-	2,915	-	2,915

Other financial instruments not carried at fair value are typically short-term in nature or reprice to current market rates frequently. Accordingly, their carrying amounts are reasonable approximations of their fair values.

## NOTES TO THE FINANCIAL STATEMENTS *(continued)*

### 57 Fair value of financial instruments *(continued)*

#### (b) Fair value of financial instruments not carried at fair value *(continued)*

The calculation of fair values of financial instruments that are not carried at fair value is described below.

The calculation of fair value incorporates the Group's estimate of the price that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date. It does not reflect the economic benefits and costs that the Group expects to flow from the instruments' cash flows over their expected future lives.

##### (i) Loans and advances to banks and customers

The fair value of loans and advances is based on observable market transactions, where available. In the absence of observable market transactions, fair value is estimated using valuation models that incorporate a range of input assumptions. Loans are grouped, as far as possible, into homogeneous groups and stratified by loans with similar characteristics to improve the accuracy of estimated valuation outputs. The stratification of a loan book considers all material factors. The fair value of a loan reflects loan impairments at the balance sheet date. For impaired loans, fair value is estimated by discounting the future cash flows over the time period they are expected to be recovered.

##### (ii) Financial investments - Held-to-maturity debt securities

The fair values of listed financial investments are determined using bid market prices. The fair values of unlisted financial investments are determined using valuation techniques that take into consideration the prices and future earnings streams of equivalent quoted securities.

##### (iii) Deposits by banks and customer accounts

For the purpose of estimating fair value, deposits by banks and customer accounts are grouped by remaining contractual maturity. Fair values are estimated using discounted cash flows, applying current rates offered for deposits of similar remaining maturities. The fair value of a deposit repayable on demand is assumed to be the amount payable on demand at the balance sheet date.

##### (iv) Debt securities in issue and subordinated liabilities

Fair values are determined using quoted market prices at the balance sheet date where available, or by reference to quoted market prices for similar instruments.

The fair values in this note are stated at a specific date and may be significantly different from the amounts which will actually be paid on the maturity or settlement dates of the instruments. In many cases, it would not be possible to realise immediately the estimated fair values given the size of the portfolios measured. Accordingly, these fair values do not represent the value of these financial instruments to the Group as a going concern.

## NOTES TO THE FINANCIAL STATEMENTS (continued)

### 58 Comparative figures

Interest and dividends received from available-for-sale investments previously included under cash flows from investing activities are presented under cash flows from operating activities in the current year as management considered that such presentation would more appropriately reflect the way the business is managed. The comparatives of net cash flows from operating and investing activities have been restated accordingly. Other than the above, certain comparative figures in the consolidated financial statements have also been reclassified to conform with current year's presentation.

### 59 Immediate and ultimate holding companies

The immediate and ultimate holding companies of the Bank are The Hongkong and Shanghai Banking Corporation Limited (incorporated in Hong Kong) and HSBC Holdings plc (incorporated in England) respectively.

### 60 Major transaction – Partial disposal of the Bank's shareholding in Industrial Bank

During 2015, the Bank has sold 9.99% (representing 1,903,316,838 ordinary shares) of the issued ordinary shares of Industrial Bank Co., Ltd. ('Industrial Bank'), and recognised a gain of HK\$10,636m for 2015.

Since there are significant financial implications as a result of the recognition of the gain on partial disposal in the consolidated income statement for 2015, the key financial results and performance metrics for 2016 are not directly comparable. For comparison, we have prepared the following key financial results and performance metrics by excluding the partial disposal gain in 2015.

	As Reported			Excluding the gain on partial disposal of Industrial Bank in 2015	
	Year ended 2016	Year ended 2015	Variance against 2015 *	Year ended 2015	Variance against 2015 *
Attributable profit	16,212	27,494	-41%	16,858	-4%
Profit before tax	19,090	30,488	-37%	19,852	-4%
Return on average ordinary shareholders' equity (%)	12.1	20.7	-8.6pp	12.6	-0.5pp
Return on average total assets (%)	1.2	2.1	-0.9pp	1.3	-0.1pp
Earnings per share (HK\$)	8.30	14.22	-42%	8.66	-4%

\*Change in "pp" represents change in percentage points.

NOTES TO THE FINANCIAL STATEMENTS (continued)

61 Balance sheet and reserve movement of the Bank

Balance Sheet at 31 December 2016

	2016	2015
	note	
<b>ASSETS</b>		
Cash and sight balances at central banks	21,080	8,294
Placings with and advances to banks	78,717	102,035
Trading assets	44,024	37,625
Derivative financial instruments	15,864	11,044
Loans and advances to customers	637,822	618,304
Amounts due from subsidiaries	17,363	21,332
Financial investments	288,994	267,382
Investments in subsidiaries	19,925	19,762
Investment properties	4,120	4,374
Premises, plant and equipment	21,639	20,774
Intangible assets	376	383
Other assets	17,020	16,246
<b>Total assets</b>	<b>1,166,944</b>	<b>1,127,555</b>
<b>LIABILITIES AND EQUITY</b>		
<b>Liabilities</b>		
Current, savings and other deposit accounts	944,263	911,135
Deposits from banks	10,757	15,566
Trading liabilities	44,150	37,757
Financial liabilities designated at fair value	3,484	3,491
Derivative financial instruments	12,746	9,848
Certificates of deposit and other debt securities in issue	4,000	4,000
Amounts due to subsidiaries	6,687	10,702
Other liabilities	20,797	16,816
Current tax liabilities	20	135
Deferred tax liabilities	2,523	2,394
Subordinated liabilities	2,327	2,325
<b>Total liabilities</b>	<b>1,051,754</b>	<b>1,014,169</b>
<b>Equity</b>		
Share capital	9,658	9,658
Retained profits	83,434	81,503
Other equity instruments	6,981	6,981
Other reserves	15,117	15,244
Shareholders' equity	115,190	113,386
<b>Total equity and liabilities</b>	<b>1,166,944</b>	<b>1,127,555</b>

Rose W M Lee *Vice-Chairman and Chief Executive*

John C C Chan *Director*

Eric K C Li *Director*

Andrew W L Leung *Chief Financial Officer*

NOTES TO THE FINANCIAL STATEMENTS (continued)

61 Balance sheet and reserve movement of the Bank (continued)

(a) Reserves movement of the Bank (continued)

	Share capital	Other equity instruments	Retained profits <sup>1</sup>	Other reserves				Total equity
				Premises revaluation reserve <sup>2</sup>	Available-for-sale investment reserve <sup>3</sup>	Cash flow hedge reserve <sup>4</sup>	Others <sup>5</sup>	
At 1 January 2016	9,658	6,981	81,503	13,092	1,465	(9)	696	113,386
Profit for the year	-	-	18,395	-	-	-	-	18,395
Other comprehensive income (net of tax)	-	-	105	627	(219)	(119)	-	394
Available-for-sale investments	-	-	-	-	(219)	-	-	(219)
Cash flow hedges	-	-	-	-	-	(119)	-	(119)
Property revaluation	-	-	-	627	-	-	-	627
Actuarial losses on defined benefit plans	-	-	106	-	-	-	-	106
Share of other comprehensive income of associates	-	-	-	-	-	-	-	-
Exchange differences and others	-	-	(1)	-	-	-	-	(1)
Total comprehensive income for the year	-	-	18,500	627	(219)	(119)	-	18,789
Dividends paid	-	-	(16,633)	-	-	-	-	(16,633)
Coupon paid to holder of AT1 capital instrument	-	-	(346)	-	-	-	-	(346)
Movement in respect of share-based payment arrangements	-	-	9	-	-	-	(15)	(6)
Transfers	-	-	401	(401)	-	-	-	-
At 31 December 2016	9,658	6,981	83,434	13,318	1,246	(128)	681	115,190
At 1 January 2015	9,658	6,981	67,159	12,168	16,523	(11)	682	113,160
Profit for the year	-	-	24,621	-	-	-	-	24,621
Other comprehensive income (net of tax)	-	-	354	1,309	(15,058)	2	4	(13,389)
Available-for-sale investments	-	-	-	-	(15,058)	-	-	(15,058)
Cash flow hedges	-	-	-	-	-	2	-	2
Property revaluation	-	-	-	1,309	-	-	-	1,309
Actuarial gains on defined benefit plans	-	-	352	-	-	-	-	352
Share of other comprehensive income of associates	-	-	-	-	-	-	-	-
Exchange differences and others	-	-	2	-	-	-	4	6
Total comprehensive income for the year	-	-	24,975	1,309	(15,058)	2	4	11,232
Dividends paid	-	-	(10,706)	-	-	-	-	(10,706)
Coupon paid to holder of AT1 capital instrument	-	-	(310)	-	-	-	-	(310)
Movement in respect of share-based payment arrangements	-	-	-	-	-	-	10	10
Transfers	-	-	385	(385)	-	-	-	-
At 31 December 2015	9,658	6,981	81,503	13,092	1,465	(9)	696	113,386

<sup>1</sup> Retained profits are the cumulative net earnings of the Bank that have not been paid out as dividends, but retained to be reinvested in the business. To satisfy the provisions of the Hong Kong Banking Ordinance and local regulatory requirements for prudential supervision purposes, the Group has earmarked a "regulatory reserve" from retained profits. Movements in the reserve are made directly through retained earnings. As at 31 December 2016, the effect of this requirement is to restrict the amount of reserves which can be distributed by the Group and the Bank to shareholders by HK\$5,945m (2015: HK\$6,610m) and HK\$5,613m (2015: HK\$6,060m) respectively.

<sup>2</sup> The premises revaluation reserve represents the difference between the fair value of the premises and its original depreciated cost. There is no premises revaluation reserve related to premises classified as assets held for sale, included in "Other assets" in the balance sheet at 31 December 2016 (31 December 2015: Nil).

<sup>3</sup> The available-for-sale investment reserve includes the cumulative net change in the fair value of available-for-sale investments other than impairments which have been recognised in the income statement.

<sup>4</sup> The cash flow hedging reserve comprises the effective portion of the cumulative net change in the fair value of cash flow hedging instruments related to hedged transactions.

<sup>5</sup> Other reserves comprise foreign exchange reserve and share-based payment reserve. The foreign exchange reserve comprises all foreign exchange differences arising from the translation of the financial statements of foreign operations. The share-based payment reserve is used to record the corresponding amount of share options granted by ultimate holding company to the Group's employees and other cost of share-based payment arrangement.

## NOTES TO THE FINANCIAL STATEMENTS *(continued)*

### 61 Balance sheet and reserve movement of the Bank *(continued)*

#### (a) Reserves movement of the Bank *(continued)*

The Bank and its banking subsidiaries operate under regulatory jurisdictions which require the maintenance of minimum capital adequacy ratios and which could therefore potentially restrict the amount of realised profits which can be distributed to shareholders.

At 31 December 2016, the aggregate amount of reserves available for distribution to equity shareholders of the Bank as calculated under the provision of Part 6 of the new Hong Kong Companies Ordinance (Cap. 622) amounted to HK\$72,270m (2015: HK\$69,780m). After considering regulatory capital requirement and business development needs, amounts of HK\$5,353m (2015: HK\$4,588m) and Nil (2015: HK\$5,736m) were declared as the proposed fourth interim dividend and special interim dividend respectively in respect of the financial year ended 31 December 2016. The difference between the aggregate distributable reserves of HK\$72,270m and the Bank's retained profit of HK\$83,434m as reported above mainly represents the exclusion of unrealised revaluation gain on investment properties and the regulatory reserve of the Bank.

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### 62 Approval of financial statements

The financial statements were approved and authorised for issue by the Board of Directors on 21 February 2017.



## **INDEPENDENT AUDITOR'S REPORT**

To the Members of Hang Seng Bank Limited  
(incorporated in Hong Kong with limited liability)

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### **Opinion**

#### *What we have audited*

The consolidated financial statements of Hang Seng Bank Limited ("the Bank") and its subsidiaries (together, "the Group") set out on pages 143 to 238, which comprise the:

- consolidated balance sheet as at 31 December 2016;
- consolidated income statement for the year then ended;
- consolidated statement of comprehensive income for the year then ended;
- consolidated statement of changes in equity for the year then ended;
- consolidated statement of cash flows for the year then ended; and
- notes to the consolidated financial statements, which include a summary of significant accounting policies.

#### *Our opinion*

In our opinion, the consolidated financial statements give a true and fair view of the consolidated financial position of the Group as at 31 December 2016, and of its consolidated financial performance and consolidated cash flows for the year then ended in accordance with Hong Kong Financial Reporting Standards ("HKFRSs") issued by the Hong Kong Institute of Certified Public Accountants ("HKICPA") and have been properly prepared in compliance with the Hong Kong Companies Ordinance.

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### **Basis for Opinion**

We conducted our audit in accordance with Hong Kong Standards on Auditing ("HKSAs") issued by the HKICPA. Our responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Consolidated Financial Statements section of our report.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinion.

#### *Independence*

We are independent of the Group in accordance with the HKICPA's Code of Ethics for Professional Accountants ("the Code"), and we have fulfilled our other ethical responsibilities in accordance with the Code.

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### **Key Audit Matters**

Key audit matters are those matters that, in our professional judgement, were of most significance in our audit of the consolidated financial statements for the current period. These matters were addressed in the context of our audit of the consolidated financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

Key audit matters identified in our audit are summarised as follows:

- Impairment of loans and advances to customers
- Information Technology ("IT") access management
- The present value of in-force long-term insurance business ("PVIF") and liabilities under non-linked life insurance contracts

## Key Audit Matters (continued)

### Impairment of loans and advances to customers

#### *Nature of the Key Audit Matter*

The Group recorded loan impairment charges of HK\$1,313 million for 2016, comprising individually impaired of HK\$539 million and collectively impaired of HK\$774 million. As at 31 December 2016, the Group recorded loan impairment allowances of HK\$1,859 million, with HK\$923 million as individual impairment allowances and HK\$936 million as collective impairment allowances.

Impairment allowances of loans and advances to customers represent management's best estimate of the losses incurred within the loan portfolios as at the balance sheet date. They are calculated on an individual basis for significant loans and on a collective basis for portfolios of loans with similar characteristics.

For individual impairment allowances, judgement is required to determine when an impairment event has occurred and then to estimate the expected future cash flows related to that loan to determine the impairment.

Collective impairment allowances are calculated using models which approximate the impact of current economic and credit conditions on the loan portfolios of the Group. The inputs to these models are based on historical loss experience and applied management judgement to determine the assumptions used to calculate impairment.

The audit was focused on loan impairment allowances due to the materiality of the balances and the calculations are inherently subject to significant judgement of management.

#### *How our audit addressed the Key Audit Matter*

We evaluated and tested the controls that management has established to support their individual and collective impairment calculations:

- For individual impairment allowances, this included controls over the identification of impaired loans (including compilation and review of the credit watch list and credit file review processes), approval of external collateral valuation vendors and controls over recording and approval of significant individual impairment allowances; and
- For collective impairment allowances, this included controls over appropriateness of models used for calculation of impairment allowances, the completeness and accuracy of the data input to those models and management's review of key assumptions within those models.

We also performed substantive audit procedures which included:

#### Individual impairment allowances –

- We evaluated the impairment calculations prepared by management based on the Group's methodologies and policies for a sample of loans across the portfolio; and
- For the selected sample of impaired loans, we evaluated management's judgement over the occurrence of the impairment event against the evidence available and tested the individual impairment allowances through re-performance of the discounted cash flow calculations. We challenged management on the key assumptions and estimations of expected future cash flows by comparing with our industry knowledge, market practice and the Group's actual loss experience.

## Key Audit Matters (continued)

### Impairment of loans and advances to customers

*Nature of the Key Audit Matter (continued)*      *How our audit addressed the Key Audit Matter (continued)*

#### *Matters discussed with the Audit Committee*

We discussed with the Audit Committee details of our testing procedures over management's controls of impaired loan identification and details of our testing procedures over individual and collective impairment allowances. At our meetings with the Audit Committee, we discussed changes to risk factors relevant to the collective allowance models as well as judgements made on individually significant loan impairments.

Collective impairment allowances –

- We evaluated independently the appropriateness of the modelling methodology by making reference to our industry knowledge and market practice; and
- We tested the model calculations through re-performance. We also challenged management on the appropriateness of key judgements, assumptions and inputs applied with respect to loan portfolio segmentation and impairment calculations, including economic factors, the period of historical loss rates used and loss emergence periods.

#### *Relevant references in the Annual Report 2016*

- Management Discussion and Analysis – Risk Management (a) Credit risk, pages 42, 46 - 47
  - Note 2(i): Critical accounting estimates and judgements in applying accounting policies, page 151
  - Note 13: Loan impairment charges and other credit risk provisions, page 170
  - Note 31: Loan and advances to customers, pages 189 - 190
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## Key Audit Matters (continued)

### IT access management

#### *Nature of the Key Audit Matter*

All banks are highly dependent on technology due to the significant number of transactions that are processed daily. The audit approach relies extensively on automated controls and therefore procedures are designed to test access and control over IT systems.

As part of the HSBC Holdings plc and its subsidiaries (“HSBC Group”), the Group highly leverages the system support provided by the HSBC Group. It was identified that the Group’s controls over individual access rights to operating systems, applications, and data used in the financial reporting process required improvement. Access rights are important as they ensure that changes to applications and data are authorised and made in an appropriate manner. Ensuring staff only have appropriate access, and that the access is monitored, are key controls to mitigate the potential for fraud or error as a result of a change to an application or underlying data.

A number of enhancements to the control environment were made during the year but some controls were not fully remediated and we have assessed the risk of material misstatement arising from access to technology as significant for the audit.

#### *How our audit addressed the Key Audit Matter*

We tested access rights over the various aspects of technology relied upon for financial reporting. Specifically, we tested that:

- New access requests to applications, operating systems and databases were properly reviewed and authorised;
- Application, operating system and database user access rights were removed on a timely basis when an individual left the Group or moved role;
- Access rights to applications, operating systems and databases were periodically monitored for appropriateness; and
- Highly privileged access to applications, operating systems and databases was monitored.

We independently assessed other areas which included password policies, security configurations, controls over changes to applications and databases and that business users, developers and production support personnel did not have access to change applications, the operating systems or databases in the production environment.

As a consequence of deficiencies identified in the controls a range of other procedures were performed:

- Where inappropriate access was identified, we have understood the nature of the access and obtained additional evidence of the appropriateness of the activities performed;
- We performed additional substantive testing on specific year-end reconciliations (custodian, bank account and suspense account reconciliations) and confirmations with external counterparties; and

## Key Audit Matters (continued)

### IT access management

#### *Nature of the Key Audit Matter (continued)*

#### *Matters discussed with the Audit Committee*

The original approach discussed with the Audit Committee was based on the proposed control enhancements, and involved the testing of new and improved control processes. This was supplemented with other control and substantive procedures required for the periods of the year when the changes would not yet have been effective. As the timing of the enhancements to controls changed during the year, we reflected this in the nature and extent of testing and our final approach was discussed with the Audit Committee.

In the Audit Committee meetings, there were discussions on the status of the control remediation programme, work performed by management and results of testing performed.

#### *Relevant references in the Annual Report 2016*

- Management Discussion and Analysis – Risk Management (e), Operational risk, page 72

#### *How our audit addressed the Key Audit Matter (continued)*

- We performed testing on other compensating controls such as business performance reviews.

A significant amount of the Group's technology processes and controls were undertaken in shared service centres located outside of Hong Kong. Our audit testing of access rights controls was also performed in the shared service centre locations.

## Key Audit Matters (continued)

<b>The present value of in-force long-term insurance business (“PVIF”) and liabilities under non-linked life insurance contracts</b>
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### *Nature of the Key Audit Matter*

The Group has recorded an asset for PVIF of HK\$13,664 million and liabilities under non-linked life insurance contracts of HK\$108,256 million as at 31 December 2016.

The determination of these balances requires the use of appropriate actuarial methodologies and also highly judgemental assumptions. Such assumptions include the long term economic returns of insurance contracts issued, assumptions over policyholder behaviour such as longevity, mortality and persistency, and management assumptions over the future costs of obtaining and maintaining the Group’s insurance business.

Small movements in these assumptions can have a material impact on the PVIF asset and the liabilities under non-linked life insurance contracts.

### *Matters discussed with the Audit Committee*

We discussed with the Audit Committee the results of our testing procedures over key assumptions used in the valuation of the PVIF asset and the liabilities under non-linked life insurance contracts including testing of changes made during the reporting period to the models and to the basis of the calculation of the risk free discount rate.

### *How our audit addressed the Key Audit Matter*

We understood and tested the controls that management had established over the valuation of PVIF asset and the liabilities under non-linked life insurance contracts. These included controls over policy data reconciliations from the policyholder administration system to the actuarial valuation system, controls over assumption setting, controls over the review and determination of valuation methodology, system access and user acceptance testing controls over the actuarial models used, and controls over the production and approval of the actuarial results.

With the assistance of our actuarial experts, we assessed the appropriateness of the models, methodologies and assumptions used (including assumptions over the long term economic returns of insurance contracts issued, assumptions over policyholder behaviour such as longevity, mortality and persistency, and assumptions relating to future costs of obtaining and maintaining the insurance business). We further evaluated and challenged management’s key judgements and assumptions. Our challenge and evaluation included whether these judgements were supported by relevant experience, market information and formed a reasonable basis for setting the assumptions.

### *Relevant references in the Annual Report 2016*

- Management Discussion and Analysis – Risk Management (d), Insurance risk, page 65
- Note 2(v): Critical accounting estimates and judgements in applying accounting policies, page 152
- Note 38: Intangible assets, page 204
- Note 45: Liabilities under insurance contracts, page 207

## **Other Information**

The directors of the Bank are responsible for the other information. The other information comprises all of the information included in the Annual Report other than the consolidated financial statements and our auditor's report thereon.

Our opinion on the consolidated financial statements does not cover the other information and we do not express any form of assurance conclusion thereon.

In connection with our audit of the consolidated financial statements, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the consolidated financial statements or our knowledge obtained in the audit or otherwise appears to be materially misstated.

If, based on the work we have performed, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

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## **Responsibilities of Directors and the Audit Committee for the Consolidated Financial Statements**

The directors of the Bank are responsible for the preparation of the consolidated financial statements that give a true and fair view in accordance with HKFRSs issued by the HKICPA and the Hong Kong Companies Ordinance, and for such internal control as the directors determine is necessary to enable the preparation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, the directors are responsible for assessing the Group's ability to continue as a going concern, disclosing, as applicable, matters related to going concern and using the going concern basis of accounting unless the directors either intend to liquidate the Group or to cease operations, or have no realistic alternative but to do so.

The Audit Committee is responsible for overseeing the Group's financial reporting process.

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## **Auditor's Responsibilities for the Audit of the Consolidated Financial Statements**

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. We report our opinion solely to you, as a body, in accordance with Section 405 of the Hong Kong Companies Ordinance and for no other purpose. We do not assume responsibility towards or accept liability to any other person for the contents of this report.

Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with HKSAAs will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these consolidated financial statements.

As part of an audit in accordance with HKSAAs, we exercise professional judgement and maintain professional scepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the consolidated financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Group's internal control.

## **Auditor's Responsibilities for the Audit of the Consolidated Financial Statements (continued)**

- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by the directors.
- Conclude on the appropriateness of the directors' use of the going concern basis of accounting and, based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the Group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the consolidated financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the Group to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the consolidated financial statements, including the disclosures, and whether the consolidated financial statements represent the underlying transactions and events in a manner that achieves fair presentation.
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the Group to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the Group audit. We remain solely responsible for our audit opinion.

We communicate with the Audit Committee regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

We also provide the Audit Committee with a statement that we have complied with relevant ethical requirements regarding independence and communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

From the matters communicated with the Audit Committee, we determine those matters that were of most significance in the audit for the consolidated financial statements for the current period and are therefore the key audit matters. We describe these matters in our auditor's report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, we determine that a matter should not be communicated in our report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

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The engagement partner on the audit resulting in this independent auditor's report is Mr. Tam Man Kit, James.

**PricewaterhouseCoopers**  
Certified Public Accountants

Hong Kong, 21 February 2017



## **SUPPLEMENTARY NOTES TO THE FINANCIAL STATEMENTS** *(unaudited)*

*(Figures expressed in millions of Hong Kong dollars unless otherwise indicated)*

These notes set out on pages 247 to 270 are supplementary to and should be read in conjunction with the consolidated financial statements set out on pages 143 to 238. The consolidated financial statements and these supplementary notes taken together comply with the Banking (Disclosure) Rules (the "Disclosure Rules") made under section 60A of the Banking Ordinance.

### **1 Basis of preparation**

- (a) Except where indicated otherwise, the financial information contained in these supplementary notes has been prepared on a consolidated basis in accordance with Hong Kong Financial Reporting Standards. Some parts of these supplementary notes, however, are required by the Disclosure Rules to be prepared on a different basis. In such cases, the Disclosure Rules require that certain information is prepared on a basis which excludes some of the subsidiaries of the Bank.

Further information regarding subsidiaries that are not included in the consolidation for regulatory purpose is set out in Management Discussion and Analysis.

- (b) The accounting policies applied in preparing these supplementary notes are the same as those applied in preparing the consolidated financial statements for the year ended 31 December 2016 as set out in note 3 to the financial statements.
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**SUPPLEMENTARY NOTES TO THE FINANCIAL STATEMENTS** (unaudited) (continued)

**2 Credit risk capital requirements**

The table below shows the capital requirements for credit risk for each class and subclass of exposures as specified in the Capital Rules.

	2016	2015
<b>Subject to internal ratings-based approach</b>		
Sovereign exposures	1,116	901
Bank exposures	1,782	2,044
Corporate exposures	20,936	19,788
Residential mortgages to individuals and property-holding shell companies	2,434	2,059
Qualifying revolving retail exposures	1,909	1,853
Small business retail exposures	14	11
Other retail exposures to individuals	480	451
Other exposures	2,054	2,093
Securitisation exposures	-	-
Equity exposures subject to simple risk-weight method under the market-based approach	1,219	1,312
Other equity exposures	1,636	1,611
<b>Total capital requirements for credit risk under internal ratings-based approach</b>	<b>33,580</b>	<b>32,123</b>
<b>Subject to standardised (credit risk) approach</b>		
<i>On-balance sheet</i>		
Sovereign exposures	-	-
Public sector entity exposures	150	131
Bank exposures	1	1
Securities firm exposures	-	-
Corporate exposures	2,017	1,691
Collective investment scheme exposures	-	-
Regulatory retail exposures	304	347
Residential mortgage loans	797	769
Other exposures which are not past due exposures	315	171
Past due exposures	25	37
Total capital requirements for on-balance sheet exposures	<b>3,609</b>	<b>3,147</b>
<i>Off-balance sheet</i>		
Direct credit substitutes	140	128
Transaction-related contingencies	-	1
Trade-related contingencies	1	1
Forward asset purchases	-	-
Partly paid-up shares and securities	-	-
Forward deposits placed	-	-
Unconditionally cancellable commitments	-	-
Other commitments	62	30
Exchange rate contracts	3	11
Interest rate contracts	-	-
Equity contracts	18	26
OTC derivative transactions and credit derivative contracts subject to valid bilateral netting agreements	-	2
Other off-balance exposures which are not elsewhere specified	-	-
Total capital requirements for off-balance sheet exposures	<b>224</b>	<b>199</b>
<b>Total capital requirements for credit risk under standardised (credit risk) approach</b>	<b>3,833</b>	<b>3,346</b>
<b>Capital required for Central Counterparties</b>	<b>-</b>	<b>-</b>
<b>Capital required for Credit Valuation Adjustment</b>	<b>190</b>	<b>270</b>
<b>Total capital requirements for credit risk</b>	<b>37,603</b>	<b>35,739</b>

The capital requirement is made by multiplying the Group's risk-weighted amount derived from the relevant calculation approach by 8 per cent. It does not reflect the Group's actual regulatory capital.

## SUPPLEMENTARY NOTES TO THE FINANCIAL STATEMENTS *(unaudited) (continued)*

### 3 Credit risk under the internal ratings-based approach

#### (a) The internal rating system

##### (i) Nature of exposures within each internal ratings-based ("IRB") class

The Group adopted advanced IRB approach for the majority of its business under the approval granted by the HKMA. The following exposures are subject to IRB approach:

- Corporate exposures include exposures to global large corporates, local large corporates, middle market corporates and small and medium-sized enterprises, non-bank financial institutions and specialised lending.
- Sovereign exposures include exposures to central governments, government agencies, central monetary institutions, multilateral development banks and relevant international organisations.
- Bank exposures include exposures to banks and regulated securities firms.
- Retail exposures include residential mortgages, qualifying revolving retail exposures, small business retail exposures and other retail exposures to individuals.
- Equity Exposures
- Other exposures mainly include notes and coins, premises, plant and equipment and other assets.

##### (ii) Risk rating systems and control mechanisms

The Group's exposure to credit risk arises from a wide range of customers and product types. To measure and manage the risk in these exposures, both to distinct customer types or product categories, the Group employs diverse risk rating systems and methodologies: judgmental, analytical, and hybrids of the two.

A fundamental principle of the Group's policy and approach is that analytical risk rating systems and scorecards are decision tools facilitating management, serving ultimately judgemental decisions for which individual approvers are accountable. In case of automated decision making process, accountability rests with those responsible for the parameters built into those processes/systems and the controls surrounding their use. For individually assessed customers, the credit process provides for at least annual review of the facility granted. Review may be more frequent, as required by circumstances.

The Group adopts a set of standards that govern the process through which risk rating systems are initially developed, judged fit for purpose, approved and implemented, the conditions under which analytical risk model outcomes can be overridden by approvers; and the process of model performance monitoring and reporting. The framework emphasises on an effective dialogue between business line and risk management, suitable independence of decision takers and a good understanding and robust reflection on the part of senior management.

Analytical risk rating systems are not static and are subject to review and modification in light of the changing environment and the greater availability and quality of data. Processes are established to capture the relevant data for continuous model improvement.

## SUPPLEMENTARY NOTES TO THE FINANCIAL STATEMENTS *(unaudited) (continued)*

### 3 Credit risk under the internal ratings-based approach *(continued)*

#### (a) The internal rating system *(continued)*

##### (iii) Application of IRB parameters

The Group-wide credit risk rating framework incorporates probability of default ("PD", representing the likelihood of a default event in a one-year horizon) of an obligor and loss severity expressed in terms of exposures at default ("EAD", an estimate of exposures at time of default) and loss given default ("LGD", the estimates of loss that the Group may incur in the event of default expressed as a percentage of EAD). These measures are used to calculate expected loss and capital requirements. They are also used in conjunction with other inputs to form rating assessments for the purpose of credit approval and for risk management decisions.

For sovereign, bank and corporate exposures, PD models are developed based on historical loss data, combining both quantitative and qualitative data on financial and various aspects such as industry environment, economic and political conditions. PD for wholesale customers segments is estimated using a Customer Risk Rating ("CRR") of 23 grades, of which 21 are non-default ratings representing varying degrees of strength of financial condition, and two are default ratings. Credit score generated by a model and/or a scorecard for individual obligor, mapped to the corresponding Customer Risk Rating, is recommended to and reviewed by credit approver taking into account all relevant information (including external rating and market data where available) for risk rating determination. The approved CRR is mapped to a PD value range of which the "mid-point" is used in regulatory capital calculation. PD models are developed where the risk profile of corporate borrower is specific to a country or a region.

LGD and EAD estimation for wholesale business is subject to Group framework of basic principles. EAD is estimated to a 12-month horizon and broadly represents the current exposure plus an estimate for future drawdown on undrawn facilities and the crystallization of contingent exposures after default. LGD focuses on the facility and collateral structure which takes into account the priority/seniority of the facility, the type and value of the collateral and past experience on the type of counterparty, which is expressed as a percentage of EAD.

The Group uses supervisory slotting criteria approach in rating its regulatory specialised lending exposure. Under this approach, rating will be assigned based on the borrower and transaction characteristics.

For retail business including residential mortgage exposures, qualifying revolving retail exposures, small business retail exposures and other retail exposures to individuals, the PD models typically incorporate the characteristics of the products and the borrower's account behaviour.

EAD models are developed for retail revolving exposures to predict additional drawdown at the time of default, plus current outstanding balance. For non-revolving retail exposures such as residential mortgage, EAD is mainly estimated based on current outstanding balance and related interest.

LGD models for retail exposures are developed based on the Group's internal loss and default experience including recovery values for different types of collaterals for secured retail exposures such as residential mortgage; for unsecured retail exposures such as qualifying revolving retail exposures, LGD models are developed based on past recovery experiences, account behaviours and repayment ability.

For management information and reporting purposes, retail portfolios are segmented into 10 Expected Loss ("EL") bands facilitating comparability across retail customer segment and product types. EL band is derived through a combination of PD and LGD.

##### (iv) Model Governance

Model governance is under the oversight of HSBC Group or Regional Model Oversight Committee ("Group MOC" or "HBAP MOC"). Local Model Oversight Committee ("Local MOC") is established for Wholesale Credit and Market Risk ("WCMR") and Retail Banking and Wealth Management ("RBWM") respectively in the Bank with comparable terms of reference as HSBC Group or Regional MOC. Local MOCs meet bi-monthly and report to Risk Management Meeting. They are chaired by the Risk function, and its membership is drawn from Risk, Finance and Businesses.

Compliance with the Group and local standards for development, validation and implementation of credit risk models are subject to review by HSBC Independent Model Review Team and HSBC Group Audit annually. Local Internal Audit also conducts regular reviews of the risk rating model application by credit and business groups.

## SUPPLEMENTARY NOTES TO THE FINANCIAL STATEMENTS *(unaudited) (continued)*

### 3 Credit risk under the internal ratings-based approach *(continued)*

#### (a) The internal rating system *(continued)*

##### (v) Use of internal ratings

While internal estimates derived from applying the IRB approach are employed in the calculation of risk-weighted exposure amounts for the purpose of determining regulatory capital requirements, they are also used in a multitude of contexts within risk management and business processes. Such uses continue to develop and become embedded as experience grows and the repository of quality data improves. They include:

- credit approval: authorities, including those for specific counterparty types and transactions, are delegated to officers and executives in the Group's credit risk function and business division involving lending activities using a risk-based approach, tiered relative to obligor customer risk rating;
- credit risk analytical tools: IRB measures are valuable tools deployed in the assessment of customer and portfolio risk; migration of customer risk rating is one of the important indicators in credit monitoring process;
- pricing: pricing products commensurately with the level of risk and cost, e.g. customer relationship managers apply a risk adjusted return on capital methodology in risk-weighted assets and profitability calculators;
- portfolio management: regular reports to respective Wholesale Credit Portfolio Oversight Committee, Retail Credit Monthly Meeting and Risk Management Meeting containing analyses of risk exposures employing IRB risk metrics, e.g. portfolio distribution by internal-credit grade, return on risk-weighted asset; the monitoring on the distribution and planning on risk weighted asset are undertaken and reviewed by Capital Management Oversight Committee regularly.
- economic capital: IRB risk measures are essential components of the credit risk economic capital model, which are evaluated in the capital adequacy assessment process of the Group;
- stress testing: IRB risk measures are stressed to understand the sensitivities of the Group's capital management plan under adverse economic environment; and
- risk appetite: IRB risk capital and risk estimates are elements of the risk appetite and internal risk control measures of the Group.

##### (vi) Credit risk mitigation

The Group's approach when granting credit facilities is on the basis of capacity to repay, rather than primarily rely on credit risk mitigation. Depending on a customer's standing and the type of product, facilities may be provided on unsecured basis. Nevertheless, mitigation of credit risk is an important aspect of effective management and takes in many forms.

The Group's general policy is to promote the use of credit risk mitigation, justified by commercial prudence and good practice as well as capital efficiency. Policies covering the acceptability, structuring, control and valuation with regard to different types of collateral security are established to ensure that they are supported by evidence and continue to fulfil their intended purpose.

The main types of recognised collateral taken by the Group are those as stated in section 80 of the Capital Rules, including (but not limited to) cash on deposit, gold bullion, equities listed in a main index and/or a recognised exchange, collective investment schemes, various recognised debt securities, residential, industrial and commercial property, etc.

The Group's policy provides that netting is only to be applied where it has the legal right to do so. Consistent with the Capital Rules, only bilateral netting arrangements are included for capital adequacy credit risk mitigation calculation.

In terms of the application within IRB approach, credit risk mitigants are considered in two broad categories: first, those which reduce the intrinsic probability of default of an obligor and therefore operate as adjustments to PD estimation, and second, those which affect estimated recoverability of obligations and require adjustment of LGD. The first includes, for example, full parental or group company guarantees; the second, collateral security of various kinds such as cash, equity, properties, fixed assets such as motor vehicles, plant and machinery, stock and debtors, bank and sovereign guarantees, etc.

**SUPPLEMENTARY NOTES TO THE FINANCIAL STATEMENTS** *(unaudited) (continued)*

**3 Credit risk under the internal ratings-based approach** *(continued)*

**(b) Exposures subject to supervisory estimates**

The following table indicates the exposure classes and the respective exposure amounts that are subject to supervisory estimates as at 31 December:

	2016	2015
<b>IRB Exposure Class</b>		
Sovereign exposures	-	-
Bank exposures	-	-
Corporate exposures	<b>11,464</b>	13,601
<b>Total EAD</b>	<b><u>11,464</u></b>	<b><u>13,601</u></b>

**(c) Exposures by IRB calculation approach**

The table below shows the Group's exposures:

	Advanced IRB approach	Supervisory slotting criteria approach	Retail IRB approach	Specific risk-weight approach	Total exposures
<b>2016</b>					
Sovereign exposures	<b>288,211</b>	-	-	-	<b>288,211</b>
Bank exposures	<b>134,318</b>	-	-	-	<b>134,318</b>
Corporate exposures	<b>450,879</b>	<b>11,464</b>	-	-	<b>462,343</b>
Retail exposures:					
- Residential mortgages to individuals and property-holding shell companies	-	-	<b>184,500</b>	-	<b>184,500</b>
- Qualifying revolving retail exposures	-	-	<b>95,696</b>	-	<b>95,696</b>
- Small business retail exposures	-	-	<b>4,819</b>	-	<b>4,819</b>
- Other retail exposures to individuals	-	-	<b>12,302</b>	-	<b>12,302</b>
Equity exposures	-	-	-	<b>11,325</b>	<b>11,325</b>
Other exposures	-	-	-	<b>51,754</b>	<b>51,754</b>
	<b><u>873,408</u></b>	<b><u>11,464</u></b>	<b><u>297,317</u></b>	<b><u>63,079</u></b>	<b><u>1,245,268</u></b>
<b>2015</b>					
Sovereign exposures	250,012	-	-	-	250,012
Bank exposures	156,992	-	-	-	156,992
Corporate exposures	437,633	13,601	-	-	451,234
Retail exposures:					
- Residential mortgages to individuals and property-holding shell companies	-	-	181,064	-	181,064
- Qualifying revolving retail exposures	-	-	93,385	-	93,385
- Small business retail exposures	-	-	5,080	-	5,080
- Other retail exposures to individuals	-	-	11,917	-	11,917
Equity exposures	-	-	-	11,482	11,482
Other exposures	-	-	-	50,299	50,299
	<b><u>844,637</u></b>	<b><u>13,601</u></b>	<b><u>291,446</u></b>	<b><u>61,781</u></b>	<b><u>1,211,465</u></b>

**SUPPLEMENTARY NOTES TO THE FINANCIAL STATEMENTS** *(unaudited) (continued)*

**3 Credit risk under the internal ratings-based approach** *(continued)*

**(d) Exposures by credit risk mitigation used**

The table below shows the Group's exposures (after the effect of any on-balance sheet or off-balance sheet recognised netting) which are covered by recognised guarantees after the application of haircuts required under the Capital Rules. These exposures exclude derivative contracts and securities financing transactions.

	2016	2015
<b>Portfolio</b>		
Sovereign exposures	-	-
Bank exposures	4,655	5,635
Corporate exposures	162,375	159,481
Retail exposures	19,459	17,942
	<u>186,489</u>	<u>183,058</u>

For the class of sovereign exposures, there were no exposures covered by recognised guarantees.

**(e) Risk assessment for exposures under IRB approach**

The tables below detail the total EAD of sovereign, bank and corporate exposures by exposure-weighted average risk-weight, exposure-weighted average PD and exposure-weighted average LGD for each obligor grade as at 31 December.

(i) Sovereign, bank and corporate (other than specialised lending) exposures - analysis by obligor grade

The exposures at default disclosed below in respect of sovereign, bank and corporate exposures have taken into account the effect of recognised collateral, recognised netting, recognised guarantees and recognised credit derivative contracts.

	2016			
	Exposure-weighted average PD %	Exposure-weighted average LGD %	Exposure-weighted average risk-weight %	Exposure at default
<b>Sovereign exposure</b>				
Minimal default risk	0.02	26.18	4.37	279,470
Low default risk	0.07	44.99	17.98	7,703
Satisfactory default risk	0.22	45.00	33.86	1,038
				<u>288,211</u>
<b>Bank exposure</b>				
Minimal default risk	0.04	40.12	11.97	94,425
Low default risk	0.07	34.77	21.20	33,519
Satisfactory default risk	0.36	43.16	54.26	5,353
Fair default risk	0.88	45.00	92.92	1,003
Significant default risk	5.75	45.01	140.47	18
				<u>134,318</u>
<b>Corporate exposure (other than specialised lending)</b>				
Minimal default risk	0.04	42.84	17.59	8,637
Low default risk	0.10	43.05	28.34	89,605
Satisfactory default risk	0.43	37.62	50.61	199,143
Fair default risk	1.21	37.10	75.05	103,925
Moderate default risk	2.81	36.29	96.90	41,224
Significant default risk	6.86	38.08	138.73	4,501
High default risk	10.20	35.10	150.55	582
Special management	19.00	41.52	206.97	52
Default	100.00	43.34	-	3,210
				<u>450,879</u>

**SUPPLEMENTARY NOTES TO THE FINANCIAL STATEMENTS** (unaudited) (continued)

**3 Credit risk under the internal ratings-based approach** (continued)

(e) **Risk assessment for exposures under IRB approach** (continued)

(i) Sovereign, bank and corporate (other than specialised lending) exposures - analysis by obligor grade (continued)

	2015			
	Exposure-weighted average PD %	Exposure-weighted average LGD %	Exposure-weighted average risk-weight %	Exposure at default
<b>Sovereign exposure</b>				
Minimal default risk	0.02	30.19	4.38	248,091
Low default risk	0.11	44.98	20.46	1,921
				<u>250,012</u>
<b>Bank exposure</b>				
Minimal default risk	0.04	42.39	12.54	114,325
Low default risk	0.08	32.85	20.42	36,390
Satisfactory default risk	0.37	45.06	54.93	5,478
Fair default risk	0.92	45.02	94.03	759
Moderate default risk	2.94	29.97	97.92	17
Significant default risk	7.85	45.00	165.77	23
				<u>156,992</u>
<b>Corporate exposure (other than specialised lending)</b>				
Minimal default risk	0.04	38.14	15.58	19,241
Low default risk	0.11	43.21	29.02	83,517
Satisfactory default risk	0.42	37.70	51.60	197,300
Fair default risk	1.20	35.79	75.45	98,060
Moderate default risk	2.60	33.93	92.09	33,326
Significant default risk	5.98	36.92	122.45	3,394
High default risk	10.00	10.73	58.83	119
Special management	18.93	52.51	279.61	104
Default	100.00	40.85	-	2,572
				<u>437,633</u>

(ii) Corporate exposures (specialised lending) - analysis by supervisory rating grade

	2016		2015	
	Exposure-weighted average risk-weight %	Exposure at default	Exposure-weighted average risk-weight %	Exposure at default
<b>Obligor Grade</b>				
Strong	72.23	9,219	63.92	11,766
Good	95.08	2,163	85.52	1,738
Satisfactory	121.90	55	121.90	97
Weak	265.00	27	-	-
		<u>11,464</u>		<u>13,601</u>



**SUPPLEMENTARY NOTES TO THE FINANCIAL STATEMENTS** (unaudited) (continued)

**3 Credit risk under the internal ratings-based approach** (continued)

(e) **Risk assessment for exposures under IRB approach** (continued)

(iii) Retail exposures - analysis by credit quality

The table below shows a breakdown of exposures (the EAD of on-balance sheet exposures and off-balance sheet exposures) on a pool basis by credit quality classification:

	<b>Residential mortgages</b>	<b>Qualifying revolving retail exposures</b>	<b>Small business retail exposures</b>	<b>Other retail exposures</b>	<b>Total exposures</b>
<b>2016</b>					
Strong	183,881	80,154	4,767	8,887	277,689
Medium	397	14,891	48	3,290	18,626
Sub-standard	-	581	-	99	680
Impaired	222	70	4	26	322
	<u>184,500</u>	<u>95,696</u>	<u>4,819</u>	<u>12,302</u>	<u>297,317</u>
<b>2015</b>					
Strong	180,408	78,210	5,080	8,774	272,472
Medium	541	14,595	-	2,977	18,113
Sub-standard	-	519	-	113	632
Impaired	115	61	-	53	229
	<u>181,064</u>	<u>93,385</u>	<u>5,080</u>	<u>11,917</u>	<u>291,446</u>

(iv) Undrawn commitments

The table below shows the amount of undrawn commitments and exposure-weighted average EAD for sovereign, bank and corporate exposures as at 31 December:

	<b>2016</b>		<b>2015</b>	
	<b>Undrawn commitments</b>	<b>Exposure-weighted average EAD</b>	<b>Undrawn commitments</b>	<b>Exposure-weighted average EAD</b>
Sovereign exposures	-	-	-	-
Bank exposures	183	90	448	218
Corporate exposures	166,094	50,543	159,361	45,222
	<u>166,277</u>	<u>50,633</u>	<u>159,809</u>	<u>45,440</u>

**SUPPLEMENTARY NOTES TO THE FINANCIAL STATEMENTS** *(unaudited) (continued)*

**3 Credit risk under the internal ratings-based approach** *(continued)*

**(f) Analysis of actual loss and estimates**

The table below set out, for each IRB exposure class, the actual loss experience reflected in impairment charge. Impairment charges are the net charge for actual losses for each IRB class made during the year.

	<b>2016</b>	2015
<b>Exposure Class</b>		
Sovereign	-	-
Bank	-	-
Corporate	<b>788</b>	867
Residential mortgage	<b>(3)</b>	-
Qualifying revolving retail	<b>647</b>	561
Other retail	<b>265</b>	224
	<u><b>1,697</b></u>	<u>1,652</u>

There is no material change of impairment charges in 2016 against 2015.

The table below set out, for each IRB exposure class, the expected loss ("EL") which is the estimated loss likely to be incurred arising from the potential default of the obligor in respect of the exposure over a one-year period.

	31 December 2015	31 December 2014
<b>Exposure Class</b>		
Sovereign	15	23
Bank	41	63
Corporate	2,240	2,114
Residential mortgage	89	87
Qualifying revolving retail	1,101	969
Other retail	233	210
	<u>3,719</u>	<u>3,466</u>

It should be noted that actual loss and EL are measured and calculated using different methodologies which may not be directly comparable. In general, EL is greater than impairment charges. The limitation arises mainly from the fundamental differences in the definition of "loss" under the accounting standards which determine impairment charges by reflecting the current circumstances and specific cashflow expectations of a customer, and the Basel III framework which determines the regulatory EL calculation on a forward looking basis using modelled estimates.

**SUPPLEMENTARY NOTES TO THE FINANCIAL STATEMENTS** (unaudited) (continued)

**3 Credit risk under the internal ratings-based approach** (continued)

**(f) Analysis of actual loss and estimates** (continued)

The tables below set out the comparison of the predicted risk estimates of the Group's credit risk models against actual outcomes of the wholesale and retail exposures.

(i) Wholesale exposures

Risk estimates as at 31 December 2015 against actual outcome for the year 2016

	PD		LGD		EAD	
	Actual %	Estimated %	Actual %	Estimated %	Actual %	Estimated %
Sovereign exposure	-	0.03	-	30.31	-	100.00
Bank exposure	-	0.19	-	35.43	-	99.74
Corporate exposure	0.81	1.15	53.18	38.21	38.79	81.85

Risk estimates as at 31 December 2014 against actual outcome for the year 2015

	PD		LGD		EAD	
	Actual %	Estimated %	Actual %	Estimated %	Actual %	Estimated %
Sovereign exposure	-	0.05	-	27.84	-	100.00
Bank exposure	-	0.25	-	37.07	-	99.86
Corporate exposure	0.81	1.11	46.50	39.94	73.12	81.37

The actual PD rate is measured using the number of obligor defaulted during the reporting period whereas the estimated PD rate is the long run average default rate estimated at the beginning of the reporting period. The PD estimated by internal model is calibrated to the Group's long run default experience. Hence, actual default rate in a particular year ("point-in-time") will typically differ from the estimated PD which is the "through the cycle" estimates as economies move above or below cyclical norms.

The estimated LGD is the exposure weighted average LGD for the portfolio, adjusted by a downturn factor, as of the beginning of the reporting period whereas the actual LGD is computed using the resolved default cases accumulated in 2016 which covers cases defaulted in or before 2016. No default and loss has been observed for Bank and Sovereign exposures during the reporting period.

The estimated EAD% represents the ratio of total model estimated exposure values to total limits for the portfolio at the beginning of the reporting period. The actual EAD% compares the realised EAD of the resolved default cases accumulated in 2016 which covers cases defaulted in or before 2016 to the limits 1 year prior to default.

**SUPPLEMENTARY NOTES TO THE FINANCIAL STATEMENTS** *(unaudited) (continued)*

**3 Credit risk under the internal ratings-based approach** *(continued)*

**(f) Analysis of actual loss and estimates** *(continued)*

(ii) Retail exposures

Risk estimates as at 31 December 2015 against actual outcome for the year 2016

	PD		LGD		EAD	
	Actual %	Estimated %	Actual %	Estimated %	Actual %	Estimated %
Residential mortgages to individuals and property-holding shell companies	<b>0.19</b>	<b>0.49</b>	<b>0.48</b>	<b>10.06</b>	<b>96.79</b>	<b>100.00</b>
Qualifying revolving retail exposures	<b>0.42</b>	<b>0.66</b>	<b>83.44</b>	<b>92.58</b>	<b>78.91</b>	<b>90.56</b>
Small business retail exposures	-	<b>0.71</b>	<b>0.02</b>	<b>5.49</b>	-	<b>100.00</b>
Other retail exposures to individuals	<b>1.95</b>	<b>2.68</b>	<b>62.64</b>	<b>75.99</b>	<b>72.01</b>	<b>100.50</b>

Risk estimates as at 31 December 2014 against actual outcome for the year 2015

	PD		LGD		EAD	
	Actual %	Estimated %	Actual %	Estimated %	Actual %	Estimated %
Residential mortgages to individuals and property-holding shell companies	0.13	0.51	0.63	10.15	96.13	100.00
Qualifying revolving retail exposures	0.42	0.67	83.54	93.11	78.58	88.87
Small business retail exposures	0.22	0.63	3.88	5.52	96.62	100.00
Other retail exposures to individuals	2.49	2.72	62.95	82.49	77.67	99.49

The actual and estimated PD rate are measured in the same ways as wholesale exposure.

The actual LGD for the retail exposures takes into account the 24-months recovery period and represents the realised LGD for cases defaulted during 2014 which were recovered within 24 months after default. The estimated LGD is the exposure weighted average LGD for the defaulted cases estimated prior to default.

The estimated EAD% represents the ratio of total model estimated EAD to total limits for cases defaulted during 2016 whereas the actual EAD% compares the exposure values of the cases defaulted in 2016 at the time of default against the maximum limit 1 year prior to default.

## SUPPLEMENTARY NOTES TO THE FINANCIAL STATEMENTS *(unaudited) (continued)*

### 4 Credit risk under the standardised (credit risk) approach

#### (a) Ratings from External Credit Assessment Institutions ("ECAIs")

The Group uses the following ECAIs to calculate its capital adequacy requirements under the standardised (credit risk) approach prescribed in the Capital Rules:

- Fitch Ratings
- Moody's Investors Service
- Standard & Poor's Ratings Services

Where exposures have been rated by the above-mentioned ECAIs, they are categorised under the following class of exposures:

- Sovereign exposures
- Public sector entity exposures
- Bank exposures
- Securities firm exposures
- Corporate exposures
- Collective investment scheme exposures

The process used to map ECAIs issuer ratings or ECAIs issue specific ratings in the Group's banking book is consistent with those prescribed in the Capital Rules.

#### (b) Credit risk mitigation

As stated in sections 98 and 99 of the Capital Rules, certain guarantees and credit derivative contracts are recognised for credit risk mitigation purposes. The main types of guarantees are from sovereigns, corporate and banks. With corporate guarantees, in order for it to be recognised as a credit risk mitigant, it must have a credit rating of A- or better by Standard & Poor's Ratings Services, Fitch Ratings or a credit rating of A3 or better by Moody's Investors Service.

SUPPLEMENTARY NOTES TO THE FINANCIAL STATEMENTS (unaudited) (continued)

4 Credit risk under the standardised (credit risk) approach (continued)

(c) Credit risk exposures under the standardised (credit risk) approach

Class of exposures	Total exposures*	Exposures after recognised credit risk mitigation		Risk-weighted amounts		Total risk-weighted amounts	Total exposures covered by recognised collateral	Total exposures covered by recognised guarantees or recognised credit derivative contracts
		Rated	Unrated	Rated	Unrated			
<b>2016</b>								
<b>On-balance sheet</b>								
Sovereign	-	151	-	-	-	-	-	-
Public sector entity	17,301	17,301	-	1,878	-	1,878	-	-
Bank	43	-	43	-	9	9	-	-
Securities firm	-	-	-	-	-	-	-	-
Corporate	27,059	-	25,252	-	25,252	25,252	1,656	151
Collective investment scheme	-	-	-	-	-	-	-	-
Regulatory retail	5,694	-	5,083	-	3,812	3,812	611	-
Residential mortgage loan	22,871	-	22,846	-	9,979	9,979	25	-
Other exposures which are not past due exposures	7,043	-	3,949	-	3,949	3,949	3,094	-
Past due exposures	218	2	216	-	314	314	10	5
	<u>80,229</u>	<u>17,454</u>	<u>57,389</u>	<u>1,878</u>	<u>43,315</u>	<u>45,193</u>	<u>5,396</u>	<u>156</u>
<b>Off-balance sheet</b>								
Off-balance sheet exposures other than OTC derivative transactions or credit derivative contracts	3,269	-	3,102	-	2,539	2,539	165	2
OTC derivative contracts	272	-	272	-	267	267	-	-
Credit derivative contracts	-	-	-	-	-	-	-	-
Other off-balance sheet exposures not elsewhere specified	-	-	-	-	-	-	-	-
	<u>3,541</u>	<u>-</u>	<u>3,374</u>	<u>-</u>	<u>2,806</u>	<u>2,806</u>	<u>165</u>	<u>2</u>
Total	<u>83,770</u>	<u>17,454</u>	<u>60,763</u>	<u>1,878</u>	<u>46,121</u>	<u>47,999</u>	<u>5,561</u>	<u>158</u>
Exposures risk-weighted at 1250%	<u>-</u>							

\* Principal amount or credit equivalent amount, as applicable, net of specific provisions.

**SUPPLEMENTARY NOTES TO THE FINANCIAL STATEMENTS** (unaudited) (continued)

**4 Credit risk under the standardised (credit risk) approach** (continued)

(c) **Credit risk exposures under the standardised (credit risk) approach** (continued)

Class of exposures	Total exposures*	Exposures after recognised credit risk mitigation		Risk-weighted amounts		Total risk-weighted amounts	Total exposures covered by recognised collateral	Total exposures covered by recognised guarantees or recognised credit derivative contracts
		Rated	Unrated	Rated	Unrated			
2015								
<b>On-balance sheet</b>								
Sovereign	-	2,542	-	-	-	-	-	-
Public sector entity	20,527	17,852	346	1,501	146	1,647	-	2,330
Bank	18	-	18	-	12	12	-	-
Securities firm	-	-	-	-	-	-	-	-
Corporate	23,793	-	21,218	-	21,218	21,218	2,364	217
Collective investment scheme	-	-	-	-	-	-	-	-
Regulatory retail	6,541	-	5,799	-	4,349	4,349	742	-
Residential mortgage loan	20,898	-	20,834	-	9,653	9,653	63	-
Other exposures which are not past due exposures	5,059	-	2,144	-	2,144	2,144	2,914	-
Past due exposures	345	1	344	-	463	463	100	3
	<u>77,181</u>	<u>20,395</u>	<u>50,703</u>	<u>1,501</u>	<u>37,985</u>	<u>39,486</u>	<u>6,183</u>	<u>2,550</u>
<b>Off-balance sheet</b>								
Off-balance sheet exposures other than OTC derivative transactions or credit derivative contracts	2,287	-	2,111	-	2,009	2,009	176	8
OTC derivative contracts	504	-	504	-	491	491	-	-
Credit derivative contracts	-	-	-	-	-	-	-	-
Other off-balance sheet exposures not elsewhere specified	-	-	-	-	-	-	-	-
	<u>2,791</u>	<u>-</u>	<u>2,615</u>	<u>-</u>	<u>2,500</u>	<u>2,500</u>	<u>176</u>	<u>8</u>
<b>Total</b>	<u>79,972</u>	<u>20,395</u>	<u>53,318</u>	<u>1,501</u>	<u>40,485</u>	<u>41,986</u>	<u>6,359</u>	<u>2,558</u>
Exposures risk-weighted at 1250%	<u>-</u>							

\* Principal amount or credit equivalent amount, as applicable, net of specific provisions.

**5 Counterparty credit risk-related exposures**

- (a) Counterparty credit risk arises from securities financing transactions and derivative contracts (referred as "relevant transaction") hereunder. It is calculated in both the trading and non-trading books, and is the risk that counterparty to a transaction may default before completing the satisfactory settlement of the transaction.

In respect of the counterparty credit risk exposures arising from relevant transaction, all credit limits are established in advance of transaction. Credit and settlement risk is captured, monitored and reported in accordance with the Group risk methodologies. Credit exposures are divided into two categories: (1) exposure measures in book or market value terms depending on the product involved; and (2) exposure measures on the basis of 95 percentile potential worst case loss estimates. These methods of calculating credit exposure apply to all counterparties and differences in credit quality are reflected in the size of the limits.

The Group adopts the current exposure method to determine its exposures to counterparty credit risk to over-the-counter ("OTC") derivative transactions.

**Collateral arrangements**

The policy for secured collateral on derivatives is guided by the Group's internal Best Practice Guidelines ensuring that the due diligence necessary to understand the effectiveness of netting and collateralisation by jurisdiction, counterparty, product and agreement type is assessed and that due-diligence standards are consistently applied.

**Credit ratings downgrade**

The credit ratings downgrade language in a Master Agreement or Credit Support Annexes defines the series of events that are triggered if the credit rating of the affected party falls below a specified level.

Under the terms of our current collateral obligations under derivative contracts, we estimate based on the positions as at 31 December 2016 that the Bank would not be required to post additional collateral in the event of one or two notch downgrade in the Bank's credit ratings (2015: Nil).

**Wrong-way risk**

Wrong-way risk occurs when a counterparty's exposures are adversely correlated with its credit quality. There are two types of wrong-way risk.

General wrong-way risk occurs when the probability of counterparty default is positively correlated with general risk factors such as where the counterparty is resident and/or incorporated in a higher-risk country and seeks to sell a non-domestic currency in exchange for its home currency.

Specific wrong-way risk occurs when the exposure to a particular counterparty is positively correlated with the probability of counterparty default such as a reverse repo on the counterparty's own bonds. Group policy sets out that specific wrong-way transactions are approved on a case by case basis.

We use a range of tools to monitor and control wrong-way risk, including requiring the business to obtain prior approval before undertaking wrong-way risk transactions outside pre-agreed guidelines. The Traded Risk functions are responsible for the control and the monitoring process. This includes the monthly submission of wrong-way risk information to Regional Risk and Risk Management Meeting.



**SUPPLEMENTARY NOTES TO THE FINANCIAL STATEMENTS** (unaudited) (continued)

**5 Counterparty credit risk-related exposures** (continued)

**(b) Counterparty credit risk exposures**

The following tables show the counterparty credit risk exposures under the advanced internal-ratings based approach and standardised (credit risk) approach.

(i) Counterparty credit risk exposures under the advanced internal-ratings based approach

	2016		2015	
	Derivative contracts*	Securities financing transactions**	Derivative contracts*	Securities financing transactions**
Gross total positive fair value	16,326	-	10,814	-
Default risk exposures, net of bilateral netting	14,778	113	12,402	187
Default risk exposures, net of cross-product netting	-	-	-	-
Recognised collateral held by type:				
Debt securities	-	1,805	-	2,316
Others	1,966	-	330	-
	<u>1,966</u>	<u>1,805</u>	<u>330</u>	<u>2,316</u>
Default risk exposures, net of recognised collateral held	<u>14,778</u>	<u>113</u>	<u>12,402</u>	<u>187</u>
Risk-weighted amounts	<u>4,265</u>	<u>7</u>	<u>7,053</u>	<u>12</u>
Notional amount of recognised credit derivative contracts which provide credit protection	<u>-</u>	<u>-</u>	<u>-</u>	<u>-</u>

\*For OTC derivative contracts, the recognised collateral is reflected in LGD.

The HKMA issued a circular on 6 August 2015 requiring exposures to central counterparties to be included in the general disclosures of counterparty credit risk related exposures under section 80 and disclosures of credit risk mitigation under section 81 of the Disclosure Rules. The relevant exposures have been disclosed accordingly.

\*\*For repo-style transactions, the recognised collateral is netted against EAD.

(ii) Counterparty credit risk exposures under the standardised (credit risk) approach

There were no outstanding securities financing transactions at 31 December 2016 (2015: Nil).

	2016	2015
<b>Derivative contracts:</b>		
Gross total positive fair value	65	248
Default risk exposures, net of bilateral netting	272	504
Default risk exposures, net of cross-product netting	-	-
Recognised collateral held by type:		
Debt securities	-	-
Others	-	-
	<u>-</u>	<u>-</u>
Default risk exposures, net of recognised collateral held	<u>272</u>	<u>504</u>
Risk-weighted amounts	<u>267</u>	<u>491</u>
Notional amount of recognised credit derivative contracts which provide credit protection	<u>-</u>	<u>-</u>

**SUPPLEMENTARY NOTES TO THE FINANCIAL STATEMENTS** *(unaudited) (continued)*

**5 Counterparty credit risk-related exposures** *(continued)*

**(c) Major classes of exposures by counterparty type**

(i) Major classes of exposures under the advanced internal ratings-based approach by counterparty type

	2016			2015		
	Contract amounts	Credit equivalent amounts	Risk-weighted amounts	Contract amounts	Credit equivalent amounts	Risk-weighted amounts
Sovereign	1,112	11	4	-	-	-
Public sector entity	-	-	-	-	-	-
Bank	1,049,632	13,356	2,575	901,321	7,564	1,722
Corporate	36,967	1,524	1,693	83,278	5,025	5,343
	<u>1,087,711</u>	<u>14,891</u>	<u>4,272</u>	<u>984,599</u>	<u>12,589</u>	<u>7,065</u>

(ii) Major classes of exposures under the standardised (credit risk) approach by counterparty type

	2016			2015		
	Contract amounts	Credit equivalent amounts	Risk-weighted amounts	Contract amounts	Credit equivalent amounts	Risk-weighted amounts
Sovereign	-	-	-	-	-	-
Public sector entity	-	-	-	-	-	-
Bank	-	-	-	-	-	-
Corporate	5,190	272	267	6,724	504	491
	<u>5,190</u>	<u>272</u>	<u>267</u>	<u>6,724</u>	<u>504</u>	<u>491</u>

The Group had no credit exposures that are risk-weighted at 1250% at 31 December 2016 (2015: Nil).

**SUPPLEMENTARY NOTES TO THE FINANCIAL STATEMENTS** (unaudited) (continued)

**5 Counterparty credit risk-related exposures** (continued)

**(d) Risk exposures to derivative transactions**

The table below gives the contract amounts, risk-weighted amounts and fair value of derivatives. The information is consistent with that in the "Capital Adequacy Ratio" return submitted to the Hong Kong Monetary Authority by the Group. The return is prepared on a consolidated basis as specified by the Hong Kong Monetary Authority under the requirement of section 3C(1) of the Banking (Capital) Rules ("the Capital Rules"). Also, the HKMA issued a circular on 6 August 2015 requiring exposures to central counterparties to be included in the general disclosures of counterparty credit risk related exposures under section 80 and disclosures of credit risk mitigation under section 81 of the Disclosure Rules. The relevant exposures have been disclosed accordingly.

Derivatives arise from futures, forward, swap and option transactions undertaken by the Group in the foreign exchange, interest rate, equity, credit and commodity markets. The contract amounts of these instruments indicate the volume of transactions outstanding at the end of the balance sheet date, they do not represent amounts at risk.

Where a legally enforceable bilateral netting is arranged with counterparty, the Group has the right to offset the gross amount of positive marked-to-market assets with any negative marked-to-market liabilities with the same customer. These offsets are recognised by the Hong Kong Monetary Authority in the calculation of risk assets for the capital adequacy ratio.

	<b>Contract amounts</b>	<b>Risk- weighted amounts</b>	<b>Fair value</b>
<b>2016</b>			
Exchange rate contracts:			
- foreign exchange	615,675	1,802	1,220
- currency swaps	120,373	591	1,721
- currency options purchased	30,576	1,500	3,249
	<u>766,624</u>	<u>3,893</u>	<u>6,190</u>
Interest rate contracts:			
- interest rate swaps	302,850	265	133
- other interest rate contracts	842	-	-
	<u>303,692</u>	<u>265</u>	<u>133</u>
Equity and other contracts:			
- equity swaps	5,689	47	6
- equity options purchased	15,013	327	306
	<u>20,702</u>	<u>374</u>	<u>312</u>

The fair values at 31 December 2016 are calculated after taking into account the effect of valid bilateral netting agreements amounting to HK\$9,756m (2015: HK\$5,840m).

	Contract amounts	Risk- weighted amounts	Fair value
<b>2015</b>			
Exchange rate contracts:			
- foreign exchange	556,913	1,365	1,858
- currency swaps	78,350	416	372
- currency options purchased	67,947	5,080	2,712
	<u>703,210</u>	<u>6,861</u>	<u>4,942</u>
Interest rate contracts:			
- interest rate swaps	268,924	263	32
- other interest rate contracts	948	-	-
	<u>269,872</u>	<u>263</u>	<u>32</u>
Equity and other contracts:			
- equity swaps	2,687	22	2
- equity options purchased	12,894	396	246
	<u>15,581</u>	<u>418</u>	<u>248</u>

**SUPPLEMENTARY NOTES TO THE FINANCIAL STATEMENTS** (unaudited) (continued)

**6 Off balance sheet exposures other than derivative transactions**

	2016	2015
<b>Contract amounts</b>		
Direct credit substitutes	8,099	7,558
Transaction-related contingencies	5,186	3,336
Trade-related contingencies	12,044	11,217
Forward asset purchases	-	-
Commitments that are unconditionally cancellable without prior notice	328,737	323,270
Commitments which have an original maturity of not more than one year	4,426	2,642
Commitments which have an original maturity of more than one year	32,178	22,126
	<u>390,670</u>	<u>370,149</u>
<b>Risk-weighted amounts</b>	<u>43,045</u>	<u>36,227</u>

The table above gives the nominal contract amounts and risk-weighted amounts of contingent liabilities and commitments. The information is consistent with that in the "Capital Adequacy Ratio" return submitted to the Hong Kong Monetary Authority ("HKMA") by the Group. The return is prepared on a consolidated basis as specified by the HKMA under the requirement of section 3C(1) of the Capital Rules.

For accounting purposes, acceptances and endorsements are recognised on the balance sheet in "Other assets" and "Other Liabilities" in accordance with HKAS 39 "Financial Instruments: Recognition and Measurement". For the purpose of the Capital Rules, acceptances and endorsements are included in the capital adequacy calculation as if they were contingencies. The contract amount of acceptances and endorsements included in the above tables for the Group was HK\$5,292m (2015: HK\$5,724m).

Contingent liabilities and commitments are credit-related instruments. Contractual amounts represent the amounts at risk should contracts be fully drawn upon and clients default. Since a significant portion of guarantees and commitments are expected to expire without being drawn upon, the total of the contractual amounts is not representative of expected future liquidity requirements.

**7 Asset securitisation**

There was no asset securitisation for which the Group is an originating institution or an investing institution at 31 December 2016 (2015: Nil).

## SUPPLEMENTARY NOTES TO THE FINANCIAL STATEMENTS (unaudited) (continued)

### 8 Market risk

- (a) Market risk is the risk that movements in market factors, including foreign exchange rates, interest rates, credit spreads or equity and commodity prices will result in profits or losses to the Group. The Hong Kong Monetary Authority has granted approval under sections 18(2)(a) and 18(5) of the Capital Rules for the Group to use the internal models approach to calculate its market risk for the risk categories of foreign exchange (including gold) and general interest rate. Standardised approach is used for the calculation of specific interest rate risk, equity risk and commodity risk.

The Group's market risk capital requirement under the internal models approach uses value at risk ('VAR') and stressed VAR.

	2016	2015
Market risk calculated by:		
- Internal models approach:		
-- VAR	251	284
-- Stressed VAR	336	705
- Standardised approach:		
-- specific interest rate exposures	1	107
-- equity exposures	-	-
-- commodity exposures	-	-
Total capital charge for market risk	<u>588</u>	<u>1,096</u>

Capital charge means an amount of regulatory capital which the Group is required to hold for an exposure to a relevant risk which, if multiplied by 12.5, becomes the risk-weighted amount of that exposure for that risk.

- (b) Methodology for valuation of market risk position under internal models approach

VAR is a technique that estimates the potential losses that could occur on risk positions as a result of movements in market rates and prices over a specified time horizon and to a given level of confidence. A Historical Simulation approach is used to model foreign currency and interest rate risk. Standard 1-day VAR is generated by revaluing the portfolio for each of 500 historical scenarios from one-day market movements, and is derived from a clean two-year time series of historic market risk factor data. Apart from the standard 1-day VAR, the Group has introduced stressed VAR since the start of 2012 according to the Basel 2.5 requirement. Stressed VAR is the measure of VAR using a continuous one-year historical period of significant stress for the trading portfolio, assuming a 10-day holding period.

- (c) Characteristics and coverage of VAR model

The VAR and stressed VAR models cover all material sources of price risk relating to foreign exchange risk and general interest rate risk. Foreign exchange risk factors include, but are not limited to, foreign currency prices and foreign currency option volatilities. General interest rate risk factors include, but are not limited to, interest rate curves and interest rate option volatilities.

Historical simulation approach is used for all outright interest rate and foreign exchange in VAR calculation. Standard VAR uses a 99% confidence interval and a one day time horizon based on 500 historical scenarios. The result is then scaled up to a ten day holding period. Stressed VAR uses a 10-day holding period and a 99% confidence interval based on a continuous one-year historical significant stress period.

Historical, hypothetical and technical scenario stress testing is performed on positions on a bi-weekly basis. Back-testing of the interest rate and foreign exchange uses actual and hypothetical profits and losses from trading operations and compares these to overall VAR on a daily basis.

Add-ons are used to capture the risks that are not adequately captured in the VAR models. The add-ons include, but are not limited to, interest rate basis risks on LIBOR tenor and bond futures. These add-ons are calibrated at least as conservatively as comparable risk factors under the internal models approach.

### 9 Operational risk

The Hong Kong Monetary Authority has granted approval under section 25(2) of the Capital Rules for the Group to use the standardised approach to calculate its operational risk.

	2016	2015
Capital charge for operational risk	<u>4,070</u>	<u>3,922</u>

Capital charge means an amount of regulatory capital which the Group is required to hold for an exposure to a relevant risk which, if multiplied by 12.5, becomes the risk-weighted amount of that exposure for that risk.

**SUPPLEMENTARY NOTES TO THE FINANCIAL STATEMENTS** (unaudited) (continued)

**10 Equity exposures in banking book**

Investments in equity shares which are intended to be held on a continuing basis, but which do not comprise investments in associates, jointly controlled entities or subsidiaries, are classified as available-for-sale securities and are reported in the balance sheet as "Financial investments". Available-for-sale securities are measured at fair value as described in notes 3(i)(i) and 3(j) to the financial statements. Included within this category are investments made by the Group for strategic purposes, which are subject to additional internal procedures and approvals to ensure that the investment is in accordance with the Group's strategy and to ensure compliance with all relevant regulatory and legal restrictions. In some cases, additional investments may be made later such that the investee becomes an associate, jointly controlled entity or subsidiary, at which point the investment is reclassified in accordance with the Group's accounting policies.

	<b>2016</b>	2015
Cumulative realised gains		
- on disposal	7	10,636
Unrealised gains:		
- recognised in reserve but not through the income statement	<b>1,553</b>	1,895

**11 Disclosure for selected exposure**

**Involvement with Special Purpose Entities ("SPEs")**

From time to time, the Group enters into certain transactions with customers in the ordinary course of business which involve the establishment of SPEs. The use of SPEs is not a significant part of the Group's activities and the Group is not reliant on SPEs for any material part of its business operations or profitability.

**12 Analysis of gross loans and advances to customers by categories based on internal classification used by the Group**

Gross advances, overdue advances, impaired advances, individually assessed and collectively assessed loan impairment allowances, the amount of new impairment allowances charged to income statement, and the amount of impaired loans and advances written off during the year in respect of industry sectors which constitute not less than 10 per cent of gross loans and advances to customers are analysed as follows:

	Gross advances	Overdue advances	Impaired advances	Individually assessed loan impairment allowances	Collectively assessed loan impairment allowances	New impairment allowances	Advances written off during the year
<b>2016</b>							
Residential mortgages	<b>184,574</b>	<b>78</b>	<b>168</b>	<b>(4)</b>	<b>(2)</b>	-	-
Commercial, industrial and international trade	<b>160,758</b>	<b>1,708</b>	<b>2,266</b>	<b>(902)</b>	<b>(550)</b>	<b>762</b>	<b>425</b>
Commercial real estate	<b>81,812</b>	<b>278</b>	<b>36</b>	<b>(2)</b>	<b>(4)</b>	<b>3</b>	-
Other property-related lending	<b>145,710</b>	<b>110</b>	<b>462</b>	<b>(8)</b>	<b>(11)</b>	<b>11</b>	-
<b>2015</b>							
Residential mortgages	181,461	112	177	(10)	(4)	4	-
Commercial, industrial and international trade	164,391	1,671	1,970	(787)	(536)	855	670
Commercial real estate	86,006	208	50	(1)	(3)	2	1
Other property-related lending	134,486	-	284	-	(14)	3	-

**SUPPLEMENTARY NOTES TO THE FINANCIAL STATEMENTS** (unaudited) (continued)

**13 Mainland activities exposures**

The analysis of mainland activities exposures is based on the categories of non-bank counterparties and the type of direct exposures defined by the Hong Kong Monetary Authority ("HKMA") under the Banking (Disclosure) Rules with reference to the HKMA Return of Mainland Activities - (MA(BS)20). This includes the mainland activities exposures extended by the Bank's Hong Kong offices and its wholly owned banking subsidiary in mainland China.

	On-balance sheet exposure	Off-balance sheet exposure	Total exposures
<b>2016</b>			
<b>Type of Counterparties</b>			
1. Central government, central government-owned entities and their subsidiaries and joint ventures (JVs)	48,468	5,179	53,647
2. Local governments, local government-owned entities and their subsidiaries and JVs	14,065	3,218	17,283
3. PRC nationals residing in Mainland China or other entities incorporated in Mainland China and their subsidiaries and JVs	56,451	22,596	79,047
4. Other entities of central government not reported in item 1 above	4,251	1,932	6,183
5. Other entities of local governments not reported in item 2 above	3,175	97	3,272
6. PRC nationals residing outside Mainland China or entities incorporated outside Mainland China where the credit is granted for use in Mainland China	46,164	1,233	47,397
7. Other counterparties where the exposures are considered by the reporting institution to be non-bank Mainland China exposures	14,305	1,163	15,468
Total	<u>186,879</u>	<u>35,418</u>	<u>222,297</u>
Total assets after provision	<u>1,260,524</u>		
On-balance sheet exposures as percentage of total assets	<u>14.83%</u>		
<b>2015</b>			
<b>Type of Counterparties</b>			
1. Central government, central government-owned entities and their subsidiaries and joint ventures (JVs)	48,144	9,643	57,787
2. Local governments, local government-owned entities and their subsidiaries and JVs	26,278	5,002	31,280
3. PRC nationals residing in Mainland China or other entities incorporated in Mainland China and their subsidiaries and JVs	60,665	21,172	81,837
4. Other entities of central government not reported in item 1 above	3,514	1,513	5,027
5. Other entities of local governments not reported in item 2 above	4,486	168	4,654
6. PRC nationals residing outside Mainland China or entities incorporated outside Mainland China where the credit is granted for use in Mainland China	48,518	3,158	51,676
7. Other counterparties where the exposures are considered by the reporting institution to be non-bank Mainland China exposures	10,611	24	10,635
Total	<u>202,216</u>	<u>40,680</u>	<u>242,896</u>
Total assets after provision	<u>1,231,738</u>		
On-balance sheet exposures as percentage of total assets	<u>16.42%</u>		

**SUPPLEMENTARY NOTES TO THE FINANCIAL STATEMENTS** (unaudited) (continued)

**14 International claims**

The Group's country risk exposures in the table below are prepared in accordance with the Hong Kong Monetary Authority's (HKMA) Return of International Banking Statistics - (MA(BS)21) guidelines. International claims are on-balance sheet exposures to counterparties based on the location of the counterparties after taking into account the transfer of risk, and represent the sum of cross-border claims in all currencies and local claims in foreign currencies.

The table shows claims on individual countries and territories or areas, after recognised risk transfer, amounting to not less than 10% of the group's total international claims.

	<b>Banks</b>	<b>Official Sector</b>	<b>Non Bank Financial Institution</b>	<b>Non-Financial Private Sector</b>	<b>Others</b>	<b>Total</b>
<b>2016</b>						
<b>Developed countries</b>	<b>66,391</b>	<b>70,793</b>	<b>13,391</b>	<b>38,709</b>	-	<b>189,284</b>
<b>Offshore centres</b>	<b>17,513</b>	<b>4,683</b>	<b>9,524</b>	<b>105,440</b>	-	<b>137,160</b>
of which : Hong Kong SAR	<b>6,159</b>	<b>1,340</b>	<b>5,843</b>	<b>84,972</b>	-	<b>98,314</b>
<b>Developing Asia and Pacific</b>	<b>66,177</b>	<b>8,774</b>	<b>7,720</b>	<b>55,886</b>	-	<b>138,557</b>
of which : China	<b>41,505</b>	<b>8,719</b>	<b>6,469</b>	<b>49,145</b>	-	<b>105,838</b>
	<b>Banks</b>	<b>Official Sector</b>	<b>Non Bank Financial Institution</b>	<b>Non-Financial Private Sector</b>	<b>Others</b>	<b>Total</b>
<b>2015</b>						
<b>Developed countries</b>	74,451	91,609	12,047	39,007	-	217,114
<b>Offshore centres</b>	16,110	2,244	12,924	112,334	-	143,612
of which : Hong Kong SAR	2,589	1,353	3,728	87,461	-	95,131
<b>Developing Asia and Pacific</b>	82,746	10,675	6,425	53,685	-	153,531
of which : China	54,388	10,619	5,177	46,620	-	116,804



## ANALYSIS OF SHAREHOLDERS

As at 31 December 2016	Shareholders		Number of Shares	
	Number	Percentage of total	Number in millions	Percentage of total
<b>Number of shares held</b>				
1 - 500	6,481	34.22	1.5	0.08
501 - 2,000	5,909	31.20	7.2	0.38
2,001 - 5,000	3,097	16.35	10.6	0.56
5,001 - 20,000	2,602	13.74	26.7	1.40
20,001 - 50,000	559	2.95	17.4	0.91
50,001 - 100,000	158	0.84	11.0	0.57
100,001 - 200,000	71	0.38	10.6	0.55
Over 200,000	60	0.32	1,826.8	95.55
	<b>18,937</b>	<b>100.00</b>	<b>1,911.8</b>	<b>100.00</b>
<b>Geographical Distribution</b>				
Hong Kong	18,655	98.51	1,909.0	99.85
Malaysia	52	0.27	0.4	0.02
Canada	44	0.23	0.1	0.01
United States of America	28	0.15	0.2	0.01
Singapore	41	0.22	1.9	0.10
United Kingdom	31	0.16	0.0	0.00
Australia	28	0.15	0.0	0.00
Macau	31	0.16	0.1	0.01
Others	27	0.15	0.1	0.00
	<b>18,937</b>	<b>100.00</b>	<b>1,911.8</b>	<b>100.00</b>

## **SUBSIDIARIES \***

Fulcher Enterprises Company Limited  
Hang Seng Bank (China) Limited  
Hang Seng Bank (Trustee) Limited  
Hang Seng Bullion Company Limited  
Hang Seng Credit Limited  
Hang Seng Data Services Limited  
Hang Seng Finance Limited  
Hang Seng Financial Information Limited  
Hang Seng Futures Limited  
Hang Seng Indexes Company Limited  
Hang Seng Insurance Company Limited  
Hang Seng Investment Management Limited  
Hang Seng Investment Services Limited  
Hang Seng Life Limited  
Hang Seng (Nominee) Limited  
Hang Seng Qianhai Fund Management Company Limited  
Hang Seng Real Estate Management Limited  
Hang Seng Security Management Limited  
Hang Seng Securities Limited  
Haseba Investment Company Limited  
High Time Investments Limited  
HSI International Limited  
Imenson Limited  
Yan Nin Development Company Limited

\* As defined in Section 15 of the Hong Kong Companies Ordinance (Cap 622).

## DIRECTORS OF SUBSIDIARIES

The names of Directors who have served on the Boards of the Bank's subsidiaries during the period from 1 January 2016 to the date of the Report of Directors of this Annual Report (unless otherwise stated) are set out below:

CHAN Kwok Wai Patrick	LI Chi Kwong Jason
CHAN Lik Sang Nixon*	LI Qiang
CHAN Shuk Pui Ivy	LIANG Chun Fei Belle
CHAN Yiu Cheong	LIN Yik Kwong Ronald
Sridhar CHANDRASEKHARAN	LIU Yu Arthur
CHEN Kwan Yiu Edward	LU Yongwei*
CHENG Cheng Shing Agnes	LUK Sai Lung
CHEUNG Ho Fai Derek	LUK Ting Lung Alan
CHEUNG Yiu Kwong Ralph	MAU Suet Fan
CHUNG Wai Yee Betty	MENG Xiao
ERH Chung Kei Johnson	NG Man Wai Ryan*
FUNG Hau Chung Andrew	NGAN Man Kit Dave
HO Hing Nin Christopher*	PANG Yiu Hung Victor
JIA Tingyu	POON Chun Ming David
JIN Fang*	POON Sun Cheong Patrick
KWAN Wing Han Margaret	PUN Tze Wah Patrick
KWAN Wing Shing Vincent	SHEN Sibao
LAM Louise*	SIN Pui Pik Jasmine
LAM Wai Chung Gordon	TAM Chi Kok Gabriel
LAM Yin Shing Donald	TAM Lai King Peggy
LAM CHEUNG Alexa	TANG Chee Ping Wilson
LEE Pui Shan Rosita	TONG Hing Yuen Michael
LEE Wai Mun Rose	TSUI Chun Man Thomas
LEONG Ka Chai	YOU Anshan
LEUNG Cheuk Yee Eunice	WANG Yee Ning Elaine
LEUNG Kit Yee Jeannie	WONG Chun Fai
LEUNG Wing Lok Andrew	WONG Wai Hung Daniel
LI Chi Chung Godwin	

\* He/She has resigned/ceased as a Director of the relevant subsidiary(ies) of the Bank.

# **CORPORATE INFORMATION AND CALENDAR**

## **CORPORATE INFORMATION**

### **BOARD OF DIRECTORS**

#### **Chairman**

Raymond K F Ch'ien GBS, CBE, JP

#### **Vice-Chairman**

Rose W M Lee JP

#### **Directors**

John C C Chan GBS, JP

Nixon L S Chan

Patrick K W Chan

Henry K S Cheng GBS

L Y Chiang JP

Andrew H C Fung JP

Fred Zulu Hu

Irene Y L Lee

Sarah C Legg

Eric K C Li GBS, OBE, JP

Vincent H S Lo GBS, JP

Kenneth S Y Ng

Richard Y S Tang SBS, JP

Peter T S Wong JP

Michael W K Wu

#### **Secretary**

C C Li

### **REGISTERED OFFICE**

83 Des Voeux Road Central, Hong Kong

Website: [www.hangseng.com](http://www.hangseng.com)

Email: [hangseng@computershare.com.hk](mailto:hangseng@computershare.com.hk)

### **STOCK CODE**

The Stock Exchange of Hong Kong Limited: 11

## **REGISTRAR**

Computershare Hong Kong Investor Services Limited  
Shops 1712-1716, 17th Floor, Hopewell Centre  
183 Queen's Road East, Wanchai, Hong Kong

## **DEPOSITARY \***

BNY Mellon Shareowner Services  
PO Box 30170  
College Station, TX 77842-3170, USA  
Telephone: 1-888-BNY-ADRS  
Website: [www.mybnymdr.com](http://www.mybnymdr.com)  
Email: [shrrelations@cpushareownerservices.com](mailto:shrrelations@cpushareownerservices.com)

\* The Bank offers investors in the United States a Sponsored Level-1 American Depositary Receipts Programme through The Bank of New York Mellon Corporation.

## **ANNUAL REPORT 2016**

This Annual Report 2016 in both English and Chinese is now available in printed form and on the Bank's website ([www.hangseng.com](http://www.hangseng.com)) and the website of Hong Kong Exchanges and Clearing Limited ("HKEx") ([www.hkexnews.hk](http://www.hkexnews.hk)).

Shareholders who:

- A) browse this Annual Report 2016 on the Bank's website and wish to receive a printed copy; or
- B) receive this Annual Report 2016 in either English or Chinese and wish to receive a printed copy in the other language version,

may send a request form, which can be obtained from the Bank's Registrar or downloaded from the Bank's website ([www.hangseng.com](http://www.hangseng.com)) or HKEx's website ([www.hkexnews.hk](http://www.hkexnews.hk)), to the Bank's Registrar:

Computershare Hong Kong Investor Services Limited  
17M Floor, Hopewell Centre  
183 Queen's Road East  
Wanchai, Hong Kong  
Facsimile: (852) 2529 6087  
Email: [hangseng@computershare.com.hk](mailto:hangseng@computershare.com.hk)

If shareholders who have chosen (or are deemed to have chosen) to read this Annual Report 2016 on the Bank's website, have difficulty in reading or gaining access to this Annual Report 2016 via the Bank's website for any reason, the Bank will promptly send this Annual Report 2016 in printed form free of charge upon the shareholders' request.

Shareholders may change their choice of means of receipt or language of the Bank's future corporate communications at any time, free of charge, by giving the Bank c/o the Bank's Registrar reasonable notice in writing or by email to [hangseng@computershare.com.hk](mailto:hangseng@computershare.com.hk).

## CALENDAR

### **2016 Full Year Results**

Announcement date 21 February 2017

### **2016 Fourth Interim Dividend\***

Announcement date 21 February 2017

Book close and record date 8 March 2017

Payment date 28 March 2017

### **2016 Annual Report**

to be posted to shareholders in late March 2017

### **Annual General Meeting**

to be held on 12 May 2017

- \* The Register of Shareholders of the Bank will be closed on Wednesday, 8 March 2017, during which no transfer of shares can be registered. To qualify for the fourth interim dividend, all transfers, accompanied by the relevant share certificates, must be lodged with the Bank's Registrar, Computershare Hong Kong Investor Services Limited, at Shops 1712-1716, 17th Floor, Hopewell Centre, 183 Queen's Road East, Wanchai, Hong Kong, for registration not later than 4:30 pm on Tuesday, 7 March 2017. The fourth interim dividend will be payable on Tuesday, 28 March 2017 to shareholders on the Register of Shareholders of the Bank on Wednesday, 8 March 2017. Shares of the Bank will be traded ex-dividend as from Monday, 6 March 2017.