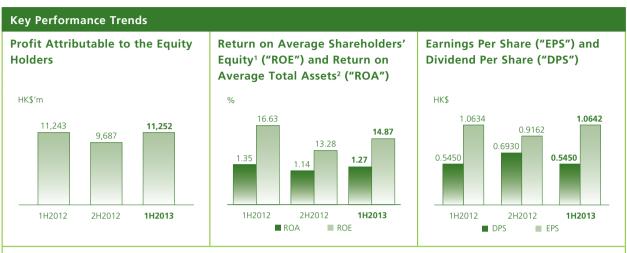
## FINANCIAL PERFORMANCE AND CONDITION AT A GLANCE

The following table is a summary of the Group's key financial results for the first half of 2013 in comparison with the previous two half-yearly periods.



#### Profit attributable to the equity holders

Profit attributable to the equity holders increased by 0.1% year-on-year to HK\$11,252 million. The increase was
driven by the sustainable growth of core income, mostly offset by lower net gain from fair value adjustments on
investment properties.

### Solid return with sustainable growth in core income

- ROE was 14.87%, down 1.76 percentage points year-on-year, as the increase in average equity outpaced that of the profit. Higher average equity was mainly caused by additions of retained earnings and premises revaluation reserve during 2012.
- ROA was 1.27%.

### Consistent return to shareholders

• EPS was HK\$1.0642. Interim dividend per share was HK\$0.545.



#### Loan and deposit growth at a steady pace

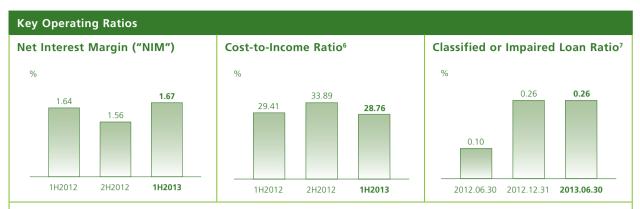
• Advances to customers increased by 6.7% while deposits from customers grew by 2.9% from the end of 2012. Loan-to-deposit ratio was 65.71%.

#### Solid capital position to support business growth

• Total capital ratio was 16.40% while Tier 1 capital ratio was 11.17%. Starting from 1 January 2013, the calculation of the capital ratios was in compliance with the Basel III Accord.

### Sound liquidity position

• Average liquidity ratio stood at a sound level of 38.70%.



#### NIM improved in the first half of 2013

• NIM was 1.67%, up 3 basis points year-on-year and 11 basis points half-on-half, mainly contributed by the improvement in loan-deposit spread.

#### **Cautious cost control**

• Cost-to-income ratio was 28.76%, down 0.65 percentage point year-on-year, among the lowest in the industry.

#### Classified or impaired loan ratio stayed at a low level

- Classified or impaired loan ratio remained low at 0.26%, below the market average.
- 1. Return on Average Shareholders' Equity as defined in "Financial Highlights".
- 2. Return on Average Total Assets as defined in "Financial Highlights".
- 3. The deposit base also includes structured deposits reported as "Financial liabilities at fair value through profit or loss".
- 4. The capital ratios are computed on the consolidated basis that comprises the positions of BOCHK and certain subsidiaries specified by the HKMA for its regulatory purposes and in accordance with the Banking (Capital) Rules. The Banking (Capital) (Amendment) Rules 2012 ("BCAR 2012") came into operation on 1 January 2013. The bases of regulatory capital calculation for credit risk, market risk and operational risk are described in Note 3.5 to the Interim Financial Information.
- 5. The average liquidity ratio is calculated as the simple average of each calendar month's average liquidity ratio of BOCHK for the period.
- 6. Certain comparative amounts in 2012 have been reclassified to conform with current period's presentation.
- 7. Classified or impaired loans follow the definitions set out in the Banking (Disclosure) Rules under the Banking Ordinance and represent advances which are either classified as "substandard", "doubtful" or "loss" under the Group's classification of loan quality, or individually assessed to be impaired.

# ECONOMIC BACKGROUND AND OPERATING ENVIRONMENT

Global economic conditions remained vulnerable to weakness in the first half of 2013. Although the European debt crisis became less acute and the US economic recovery appeared largely on track, macroeconomic fundamentals in advanced economies remained weak with low GDP growths and elevated unemployment rates. Financial markets were susceptible to volatility towards the end of the first half after the Federal Reserve hinted at the possible phase out of quantitative easing measures. In the Mainland, economic growth also slowed owing to softening external demand and fixed investments.

In spite of weak external demand, the Hong Kong economy continued to grow at a modest pace, led by robust growth in private consumption. The unemployment rate remained at a low level. Inflationary pressure edged up, with the year-on-year Composite CPI increasing by 3.9% in the first half of 2013.

The local residential property market remained fairly upbeat in early 2013 but cooled following the introduction of further proactive measures by the government in February 2013. Prices of residential properties stabilised while transaction volumes plunged. Meanwhile, the local stock market saw increased volatility. Market sentiment turned negative with uncertainty about the Federal Reserve's exit strategy for monetary stimulus and the slowdown of economic growth in the Mainland. At the end of June 2013, the Hang Seng Index was down 8.2% from the end of 2012.

Overall liquidity in the banking sector remained abundant and market interest rates remained low. Average 1-month HIBOR and USD LIBOR was 0.22% and 0.20% in the first half of 2013, down 0.10 and 0.05 percentage point respectively year-on-year.

A number of initiatives were introduced to foster further development of the offshore RMB business in Hong Kong. These included the further relaxation of investment restrictions relating to the RMB Qualified Foreign Institutional Investors ("RQFII") scheme and the announcement of the special funding arrangement to encourage certain industries to operate in the Qianhai Shenzhen-Hong Kong Modern Service Industry Cooperation Zone ("Qianhai"). The HKMA also removed the limits on RMB net open position and RMB liquidity ratio calculation. In July 2013, operating procedures for cross-border RMB business was simplified. These initiatives gave banks more flexibility to conduct RMB business.

In summary, the operating environment for the banking industry remained challenging in the first half of 2013. While the offshore RMB market continued to develop and provided the banking sector with more opportunities, the low interest rate environment, weak external demand and keen market competition underpinned the profitability of banks.

### **CONSOLIDATED FINANCIAL REVIEW**

## Financial Highlights

HK\$'m	Half-year ended	Half-year ended	Half-year ended
	30 June 2013	31 December 2012	30 June 2012
Net operating income before impairment allowances	19,791	17,521	18,096
Operating expenses	(5,692)	(5,937)	(5,322)
Operating profit before impairment allowances Operating profit after impairment allowances Profit before taxation	14,099	11,584	12,774
	13,728	10,833	12,666
	13,948	11,696	13,825
Profit attributable to the equity holders of the Company	11,252	9,687	11,243

Note: Certain comparative amounts in 2012 have been reclassified to conform with current period's presentation.

In the first half of 2013, uncertainties remained in the global financial markets. The Group closely monitored market changes and took proactive measures in managing its assets and liabilities, in conjunction with risk management principles and policies to safeguard its asset quality. It continued to implement a balanced growth strategy while maintaining disciplined cost control. As a result, the Group recorded satisfactory growth in core businesses with its key financial ratios staying at healthy levels.

The Group's net operating income before impairment allowances increased by HK\$1,695 million or 9.4% year-on-year to HK\$19,791 million in the first half of 2013. The increase was driven by the growth in both net interest income and net fee and commission income. Other income also increased, mainly attributable to the higher income of the Group's insurance segment. Operating

expenses rose, as a result of the business expansion. Net charge of impairment allowances increased by HK\$263 million while the net gain from fair value adjustments on investment properties fell by HK\$823 million year-on-year, mostly offsetting the operating income growth. Profit attributable to the equity holders rose mildly by HK\$9 million, or 0.1%, to HK\$11,252 million.

As compared to the second half of 2012, the Group's net operating income before impairment allowances rose by HK\$2,270 million, or 13.0%. The growth in income was driven by the increase in net interest income and net fee and commission income. Net charge of impairment allowances decreased by HK\$380 million and net gain from fair value adjustments on investment properties also declined by HK\$656 million. Profit attributable to the equity holders increased by HK\$1,565 million, or 16.2%, on a half-on-half basis.

#### **INCOME STATEMENT ANALYSIS**

Analyses of the Group's financial performance and business operations are set out in the following sections.

#### Net Interest Income and Margin

HK\$'m, except percentages	Half-year ended	Half-year ended	Half-year ended
	30 June 2013	31 December 2012	30 June 2012
Interest income	18,459	17,641	17,772
Interest expense	(5,128)	(5,552)	(5,153)
Net interest income	13,331	12,089	12,619
Average interest-earning assets Net interest spread Net interest margin*	1,607,052	1,540,489	1,544,663
	1.58%	1.44%	1.53%
	1.67%	1.56%	1.64%

<sup>\*</sup> Net interest margin is calculated by dividing net interest income by average interest-earning assets.

Compared to the first half of 2012, the Group's net interest income increased by HK\$712 million or 5.6%. The increase was driven by both the growth in average interest-earning assets and the widening of net interest margin.

Average interest-earning assets expanded by HK\$62,389 million or 4.0% year-on-year, with growth in loans and advances as well as debt securities investments. These were supported by the increase in customer deposits,

partly offset by the decrease in participating banks' RMB deposits with the clearing bank.

Net interest margin widened by 3 basis points to 1.67%. The increase was mainly attributable to the improved loan and deposit spread. Loan pricing on corporate lending was higher. The Group exercised cautious control of deposit costs. The positive impact was partly offset by lower yields on placements with banks and debt securities investments as market interest rates lowered during the period.

The summary below shows the average balances and average interest rates of individual categories of assets and liabilities:

	Half-year ended 30 June 2013				Half-year ended 30 June 2012	
	Average balance	Average vield	Average balance	Average vield	Average balance	Average vield
ASSETS	HK\$'m	%	HK\$'m	%	HK\$'m	%
Balances and placements with banks						
and other financial institutions	291,332	2.34	283,832	2.43	388,424	2.42
Debt securities investments	510,305	2.06	498,173	1.97	444,859	2.18
Loans and advances to customers	791,467	2.49	744,020	2.42	696,697	2.34
Other interest-earning assets	13,948	1.66	14,464	1.88	14,683	1.55
Total interest-earning assets	1,607,052	2.32	1,540,489	2.27	1,544,663	2.31
Non interest-earning assets	229,264	-	199,111	-	184,455	_
Total assets	1,836,316	2.03	1,739,600	2.01	1,729,118	2.06
	Average	Average	Average	Average	Average	Average
	balance	rate	balance	rate	balance	rate
LIABILITIES	HK\$'m	%	HK\$'m	%	HK\$'m	%
Deposits and balances from banks and						
other financial institutions	119,554	0.45	96,865	0.60	190,083	0.71
Current, savings and fixed deposits	1,187,636	0.77	1,158,442	0.84	1,066,697	0.77
Subordinated liabilities	28,178	0.59	28,715	0.90	28,640	1.29
Other interest-bearing liabilities	54,593	0.82	45,060	0.90	42,953	0.95
Total interest-bearing liabilities	1,389,961	0.74	1,329,082	0.83	1,328,373	0.78
Non interest-bearing deposits Shareholders' funds* and	84,812	_	79,751	_	87,466	-
non interest-bearing liabilities	361,543	-	330,767	-	313,279	_
Total liabilities	1,836,316	0.56	1,739,600	0.63	1,729,118	0.60

<sup>\*</sup> Shareholders' funds represent capital and reserves attributable to the equity holders of the Company.

Compared to the second half of 2012, net interest income increased by HK\$1,242 million or 10.3%, driven by higher average interest-earning assets and net interest margin. Average interest-earning assets grew by HK\$66,563 million or 4.3%, which was supported by the increases

in customer deposits and deposits from banks and other financial institutions. Net interest margin was up 11 basis points. This was mainly attributable to the improved loan pricing and lower deposit cost.

#### Net Fee and Commission Income

HK\$'m	Half-year ended 30 June 2013	Half-year ended 31 December 2012	Half-year ended 30 June 2012
Credit card business	1,734	1,684	1,477
Securities brokerage	1,224	1,060	1,054
Loan commissions	1,078	800	974
Insurance	708	369	596
Funds distribution	441	308	232
Bills commissions	387	366	370
Payment services	322	342	325
Trust and custody services	181	181	179
Safe deposit box	122	110	118
Currency exchange	88	87	69
Others	224	195	214
Fee and commission income	6,509	5,502	5,608
Fee and commission expenses	(1,828)	(1,772)	(1,575)
Net fee and commission income	4,681	3,730	4,033

Note: Certain comparative amounts of fee and commission income and fee and commission expense have been reclassified to conform with current period's presentation.

Net fee and commission income grew by HK\$648 million, or 16.1%, year-on-year to HK\$4,681 million. The increase was broad-based with strong growth of fee and commission income from credit cards, funds distribution and securities brokerage. Fee income from the credit card business grew by 17.4%, driven by the increases in cardholder spending and merchant acquiring volume by 8.3% and 20.3% respectively. Commission income from funds distribution rose substantially by 90.1% as the Group rolled out products with effective segmentation to meet targeted customers' needs. Securities brokerage fee income increased by 16.1%, supported by the Group's continuous effort in enhancing its business platform and

the pickup of transaction in the stock market. Commission income from insurance and loans increased by 18.8% and 10.7% respectively. Income from currency exchange and bills commissions also registered satisfactory growth. The increase in fee and commission expenses was mainly caused by higher credit cards and insurance related expenses.

Compared to the second half of 2012, net fee and commission income grew by HK\$951 million or 25.5%. The growth was again broad-based with increases in commission income from insurance, loans, securities brokerage, funds distribution and credit cards.

## Net Trading Gain

HK\$'m	Half-year ended 30 June 2013	Half-year ended 31 December 2012	Half-year ended 30 June 2012
Foreign exchange and foreign exchange products Interest rate instruments and items under	1,019	1,052	936
fair value hedge	197	595	305
Equity instruments	183	16	104
Commodities	42	58	63
Net trading gain	1,441	1,721	1,408

Net trading gain was HK\$1,441 million, increasing by HK\$33 million, or 2.3% from the first half of 2012. The growth in net trading gain from foreign exchange and foreign exchange products was mainly driven by growing currency exchange activities and the foreign exchange gain on foreign exchange swap contracts\*. The decrease in net trading gain from interest rate instruments and items under fair value hedge was mainly attributable to the mark-to-market changes of certain debt securities,

caused by market interest rate movements. The growth in net trading gain from equity instruments was mainly attributable to the increased gain from equity-linked products that were well received by customers.

Compared to the second half of 2012, net trading gain was down HK\$280 million or 16.3%. The decline was attributed to the mark-to-market changes of certain debt securities, partly offset by the higher gain from equity securities.

\* Foreign exchange swap contracts are usually used for the Group's liquidity management and funding activities. Under the foreign exchange swap contracts, the Group exchanges one currency (original currency) for another (swapped currency) at the spot exchange rate (spot transaction) and commits to reverse the spot transaction by exchanging the same currency pair at a future maturity at a predetermined rate (forward transaction). In this way, surplus funds in original currency are swapped into another currency for liquidity and funding purposes with minimal foreign exchange risk. The exchange difference between the spot and forward contracts is recognised as foreign exchange gain or loss (as included in "net trading gain/(loss)"), while the corresponding interest differential between the surplus funds in original currency and swapped currency is reflected in net interest income.

# Net (Loss)/Gain on Financial Instruments Designated at Fair Value through Profit or Loss ("FVTPL")

HK\$'m	Half-year ended	Half-year ended	Half-year ended
	30 June 2013	31 December 2012	30 June 2012
Net (loss)/gain on financial instruments designated at fair value through profit or loss	(520)	561	186

The Group recorded a net loss of HK\$520 million on financial instruments designated at FVTPL in the first half of 2013, compared to a net gain of HK\$186 million in the first half of 2012. The net loss in the first half of 2013 was mainly attributable to the mark-to-market changes of debt securities of BOC Life, caused by market interest rate movements. The changes in market value of

its securities portfolio were offset by the corresponding changes in policy reserves, as reflected in the changes in net insurance benefits and claims which were attributable to the movement of market interest rates.

The net gain in the second half of 2012 was mainly attributable to the gain from the investment portfolio of BOC Life amid the recovering financial market.

## **Operating Expenses**

HK\$'m	Half-year ended 30 June 2013	Half-year ended 31 December 2012	Half-year ended 30 June 2012
Staff costs	3,234	3,378	3,028
Premises and equipment expenses (excluding depreciation)	744	775	681
Depreciation on owned fixed assets	810	771	722
Other operating expenses	904	1,013	891
Total operating expenses	5,692	5,937	5,322

	At 30 June	At 31 December	At 30 June
	2013	2012	2012
Staff headcount measured in full-time equivalents	14,416	14,638	14,534

Note: Certain comparative amounts of operating expenses have been reclassified to fee and commission expense to conform with current period's presentation.

Total operating expenses increased by HK\$370 million, or 7.0%, to HK\$5,692 million year-on-year, as a result of the Group's business expansion. The Group continued to invest in new business platforms and the Mainland business. At the same time, it adhered to disciplined cost control measures to enhance operational efficiency.

Staff costs increased by 6.8% from the first half of 2012, mainly due to higher salaries following the annual salary increment and the increase in performance-related remuneration.

Premises and equipment expenses were up 9.3% with higher rental for branches in Hong Kong and the Mainland.

Depreciation on owned fixed assets rose by 12.2%, due to larger depreciation charge on premises following the upward property revaluation.

Other operating expenses were up 1.5%, mainly due to higher marketing expenses and business taxes of NCB (China).

Compared to the second half of 2012, operating expenses declined by HK\$245 million or 4.1%. The decrease was due to lower staff costs, advertising, maintenance, business taxes and IT expenses in the first half of 2013.

## Net Charge of Loan Impairment Allowances

HK\$'m	Half-year ended	Half-year ended	Half-year ended
	30 June 2013	31 December 2012	30 June 2012
Net charge of allowances before recoveries  – individual assessment  – collective assessment	(82)	(507)	(5)
	(476)	(368)	(238)
Recoveries	190	108	156
Net charge of loan impairment allowances	(368)	(767)	(87)

The Group maintained stringent risk management and overall loan quality remained solid. The net charge of loan impairment allowances was HK\$368 million in the first half of 2013. Net charge of individually assessed impairment allowances amounted to HK\$82 million, mainly relating to the downgrade of a few corporate loans. The net charge of collectively assessed impairment allowances amounted to HK\$476 million, primarily due to the loan

growth and the periodic update of the parameter values in the assessment model during the period. Meanwhile, recoveries amounted to HK\$190 million, slightly higher year-on-year.

Compared to the second half of 2012, net charge of loan impairment allowances decreased by HK\$399 million or 52.0%. The decline was mainly due to the lower net charge of individually assessed impairment allowances.

# BALANCE SHEET ANALYSIS Asset Deployment

	1	At 30 June 2013	At 3	December 2012
HK\$'m, except percentages	Amount	% of total	Amount	% of total
Cash and balances with banks and other financial institutions Placements with banks and other	182,450	9.9%	198,748	10.9%
financial institutions maturing between one and twelve months Hong Kong SAR Government	54,511	3.0%	66,025	3.6%
certificates of indebtedness	90,080	4.9%	82,930	4.5%
Securities investments <sup>1</sup>	486,134	26.5%	531,696	29.0%
Advances and other accounts	885,267	48.3%	819,739	44.8%
Fixed assets and investment properties	64,256	3.5%	63,107	3.4%
Other assets <sup>2</sup>	71,963	3.9%	68,518	3.8%
Total assets	1,834,661	100.0%	1,830,763	100.0%

<sup>1.</sup> Securities investments comprise investment in securities and financial assets at fair value through profit or loss.

<sup>2.</sup> Interests in associates and a joint venture, deferred tax assets and derivative financial instruments are included in other assets.

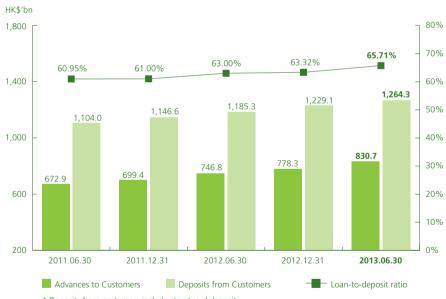
As at 30 June 2013, the Group's total assets amounted to HK\$1,834,661 million, up HK\$3,898 million or 0.2% from the end of 2012. The Group maintained its proactive asset and liability management for sustainable growth and profitability. It continued to adopt a balanced strategy to support business growth with focus on optimising asset allocation, enhancing loan pricing and controlling funding costs.

Key changes in the Group's total assets include:

- Cash and balances with banks and other financial institutions decreased by 8.2%, mainly due to the decrease in RMB funds placed with the People's Bank of China by BOCHK's clearing business.
- Placements with banks and other financial institutions maturing between one and twelve months dropped by 17.4% as the Group redeployed its funds for advances to customers.
- Securities investments decreased by 8.6% with reduction mainly in lower yielding government-related securities.

  Meanwhile, the Group also increased holdings in high-quality financial institutions and corporate bonds.
- Advances and other accounts rose by 8.0%, mainly attributable to the growth in advances to customers by 6.7% and trade bills by 29.8%.
- Other assets grew by 5.0%, which was mainly led by the increase in reinsurance assets.

### Advances to customers and deposits from customers\*



#### Advances to Customers

	At 30 June 2013		At 31 D	ecember 2012
HK\$'m, except percentages	Amount	% of total	Amount	% of total
Loans for use in Hong Kong	505,465	60.9%	480,753	61.8%
Industrial, commercial and financial	270,048	32.5%	252,877	32.5%
Individuals	235,417	28.4%	227,876	29.3%
Trade finance	76,494	9.2%	67,137	8.6%
Loans for use outside Hong Kong	248,784	29.9%	230,374	29.6%
Total advances to customers	830,743	100.0%	778,264	100.0%

The Group adhered to stringent risk control and customer selection to achieve quality growth of its loan book. Advances to customers grew by HK\$52,479 million or 6.7% to HK\$830,743 million as at 30 June 2013.

Loans for use in Hong Kong grew by HK\$24,712 million or 5.1%.

- Lending to the industrial, commercial and financial sectors increased by HK\$17,171 million, or 6.8%, to HK\$270,048 million. The increase covered a wide range of industries. Loans to the property investment, property development, transport and transport equipment, wholesale and retail as well as stockbrokers grew by 7.4%, 10.2%, 8.0%, 6.6% and 116.1% respectively.
- Lending to individuals increased by HK\$7,541 million, or 3.3%. Residential mortgage loans (excluding those under the Government-sponsored home purchasing schemes) were up 3.0%. Other loans to individuals increased by 16.7%.

Trade finance rose by HK\$9,357 million, or 13.9% while loans for use outside Hong Kong grew by HK\$18,410 million or 8.0%.

## Loan Quality

HK\$'m, except percentages	At 30 June 2013	At 31 December 2012
Advances to customers	830,743	778,264
Classified or impaired loan ratio	0.26%	0.26%
Impairment allowances	4,120	3,705
Regulatory reserve for general banking risks	8,145	7,754
Total allowances and regulatory reserve	12,265	11,459
Total allowances as a percentage of advances to customers	0.50%	0.48%
Impairment allowances¹ on classified or impaired loan ratio	39.81%	37.44%
Residential mortgage loans <sup>2</sup> – delinquency and rescheduled loan ratio <sup>3</sup>	0.03%	0.02%
Card advances – delinquency ratio <sup>3</sup>	0.26%	0.17%

	Half-year ended 30 June 2013	Half-year ended 30 June 2012
Card advances – charge-off ratio <sup>4</sup>	1.43%	1.23%

- 1. Referring to impairment allowances on loans classified as "substandard", "doubtful" or "loss" under the Group's classification of loan quality, or individually assessed to be impaired.
- 2. Residential mortgage loans exclude those under the Home Ownership Scheme and other government-sponsored home purchasing schemes.
- 3. Delinquency ratio is measured by a ratio of total amount of overdue loans (more than three months) to total outstanding loans.
- 4. Charge-off ratio is measured by a ratio of total write-offs made during the period to average card receivables during the period.

The Group's overall loan quality remained sound. The classified or impaired loan ratio was at 0.26%. Classified or impaired loans increased by HK\$66 million, or 3.2%, to HK\$2,120 million. Formation of new classified or impaired loans in the first half of 2013 was at a low level and represented approximately 0.05% of total loans outstanding.

Total impairment allowances, including both individual assessment and collective assessment, amounted to HK\$4,120 million. Total impairment allowances on

classified or impaired loans as a percentage of total classified or impaired loans was at 39.81%.

The credit quality of the Group's residential mortgage loans and credit cards remained sound. The combined delinquency and rescheduled loan ratio of residential mortgage loans stood at 0.03% at the end of June 2013. The charge-off ratio of card advances remained low at 1.43% in the first half of 2013, the year-on-year uptrend was in line with the market.

## **Deposits from Customers\***

	At 30 June 2013		At 31 December 2012	
HK\$'m, except percentages	Amount	% of total	Amount	% of total
Demand deposits and current accounts	99,668	7.9%	97,295	7.9%
Savings deposits	564,485	44.6%	603,565	49.1%
Time, call and notice deposits	595,603	47.1%	525,430	42.8%
	1,259,756	99.6%	1,226,290	99.8%
Structured deposits	4,534	0.4%	2,841	0.2%
Deposits from customers	1,264,290	100.0%	1,229,131	100.0%

<sup>\*</sup> Including structured deposits.

The Group maintained a flexible deposit strategy to support its business growth. Its deposit base increased by HK\$35,159 million, or 2.9%, in the first half of 2013. Demand deposits and current accounts rose by 2.4%

while time, call and notice deposits grew by 13.4%. Saving deposits decreased by 6.5%. The Group's loan-to-deposit ratio was 65.71% at the end of June 2013, up 2.39 percentage points from the end of 2012.

## Capital and Reserves Attributable to the Equity Holders of the Company

HK\$'m	At 30 June 2013	At 31 December 2012
Share capital	52,864	52,864
Premises revaluation reserve	32,503	31,259
Reserve for fair value changes of available-for-sale securities Regulatory reserve	1,030 8,145	5,510 7,754
Translation reserve Retained earnings	919 56,345	771 52,811
Reserves	98,942	98,105
Capital and reserves attributable to the Equity Holders of the Company	151,806	150,969

Capital and reserves attributable to the equity holders increased by HK\$837 million, or 0.6% to HK\$151,806 million at 30 June 2013. Retained earnings rose by 6.7%, reflecting the profit for the first half of 2013 after the appropriation of final dividend of 2012. Premises revaluation reserve increased by 4.0%, which was

attributable to the increase in property prices in the first half of 2013. Regulatory reserve rose by 5.0% due to loan growth. Reserve for fair value changes of available-for-sale securities decreased by 81.3%, mainly due to the changes in market interest rates.

## Capital and Liquidity Ratio

HK\$'m, except percentages	At 30 June 2013
Capital ratios under Basel III	
Consolidated capital after deductions	
Common Equity Tier 1 capital	91,071
Additional Tier 1 capital	1,027
Tier 1 capital	92,098
Tier 2 capital	43,209
Total capital	135,307
Total risk-weighted assets	824,850
Common Equity Tier 1 capital ratio	11.04%
Tier 1 capital ratio	11.17%
Total capital ratio	16.40%

	At 31 December 2012
Capital ratios under Basel II	
Consolidated capital base after deductions	
Core capital	89,096
Supplementary capital	32,452
Total capital base	121,548
Total risk-weighted assets	723,699
Core capital ratio	12.31%
Capital adequacy ratio	16.80%

	Half-year ended 30 June 2013	Half-year ended 30 June 2012
Average liquidity ratio	38.70%	39.87%

The Banking (Capital) (Amendment) Rules 2012 ("BCAR 2012") came into operation on 1 January 2013. The BCAR 2012 mainly addressed the revision to both the minimum capital ratio requirement and the definition of regulatory capital. The rules also included enhancements to the counterparty credit risk framework and amendments on the capital treatment for certain trade financing activities and securities financing transactions. For details of the Group's calculation of capital charges, please refer to Note

3.5 to the Interim Financial Information.

Total capital ratio at 30 June 2013 was 16.40%. As a result of the adoption of the BCAR 2012, the capital ratios shown above are not directly comparable.

The average liquidity ratio in the first half of 2013 remained sound at 38.70%.

## **BUSINESS REVIEW**

## **Business Segment Performance**

**Profit before Taxation by Business Segments** 

	Half-year ended 30 June 2013		Half-year ended 30 June 2012	
HK\$'m, except percentages	Amount	% of total	Amount	% of total
Personal Banking	3,572	25.6%	2,763	20.0%
Corporate Banking	5,873	42.1%	5,142	37.2%
Treasury	3,918	28.1%	4,702	34.0%
Insurance	564	4.0%	451	3.3%
Others	21	0.2%	767	5.5%
Total profit before taxation	13,948	100.0%	13,825	100.0%

Note: For additional segmental information, see Note 40 to the Interim Financial Information.

#### PERSONAL BANKING

#### **Financial Results**

Personal Banking recorded a strong increase of HK\$809 million, or 29.3%, in profit before taxation. This was mainly attributable to the increase in net interest income and net fee and commission income.

Net interest income increased by 16.3%. This was made possible by the increase in average balance of loans and deposits with the improvement in loan and deposit spread.

Net fee and commission income rose by 32.2%, mainly attributable to the higher commission income from securities brokerage, funds distribution, insurance, credit cards as well as loans.

Net trading gain also increased by 22.6%, due to higher income from equity instruments and foreign exchange related products.

#### **Business operation**

The Group's personal lending business continued its trajectory of steady growth in the first half of 2013. It remained the market leader in new mortgage loans. The funds distribution and insurance business performed strongly. The wealth management platform was further enhanced while the new Private Banking service made solid progress. Distribution channels were further optimised to enhance customer experience.

#### Residential mortgages – reinforcing the market leadership

Despite the slowdown in the residential property market, the Group continued to innovate to provide customers with the widest range of products and services across

all channels. The "Fixed-Rate Mortgage Scheme" was launched to provide homeowners with an alternative financing option to lock in their loan expenses. Subsequently, the new "Portable Fixed-Rate Mortgage Scheme" was introduced to allow customers to carry the fixed rate of the original mortgage plan to a new property during the fixed-rate period. The Group also partnered with the Hong Kong Mortgage Corporation Limited to actively promote Reverse Mortgages. Seminars were conducted to selected segment and Member-Get-Member programme was launched to reach out to existing customers. The extensive range of products and services enabled the Group to remain as the market leader of new mortgage loans underwritten during the period. At the end of June 2013, the balance of the Group's mortgage loans grew by 3.0% compared with the end of last year.

# Investment and insurance businesses – robust growth in funds distribution and insurance business

Market sentiment turned weak with concerns over the monetary stimulus programme in the US and the economic slowdown in the Mainland. Nevertheless, the Group continued to expand its stock brokerage services to lead the market in the personal securities services. IPO placement services, traditionally offered to Private Banking customers only, were introduced to selected personal banking customers. With the aim of enhancing customers' investment knowledge, the Group launched the educational "Virtual Securities Investment Platform". This platform allows customers to conduct virtual securities trading for stocks, ETFs and warrants with virtual money based on real time stock prices, reinforcing the concept of "learn before you invest" to all users.

For the funds distribution business, the Group continued to broaden its product offerings. A new retail fund, the "BOCHK All Weather RMB High Yield Bond Fund" was launched in March and received overwhelming response from customers. The Group continued to deepen relationships with existing customers and actively pursued new customers. Themed marketing campaigns and investment seminars were conducted to help customers further diversify their investment portfolios. As a result, commission income from funds distribution surged by 90.1% over the same period last year. The Group continued to leverage on its competitive edge in the bond distribution business and became one of the largest placing banks of the third iBond issuance in June this year.

With regards to the Bancassurance business, the Group maintained its competitive edge in life insurance by offering a diversified range of products. It maintained its leading position in the RMB insurance market. The HKD/ USD denominated "UltiChoice Universal Life Insurance Plan" was introduced during the period.

# Credit card business – recognised leader in CUP card business

The Group's credit card business registered steady development in the first half of 2013. It maintained its leadership in the China UnionPay ("CUP") merchant acquiring business and card issuing business in Hong Kong. The cardholder spending and merchant acquiring volumes grew by 8.3% and 20.3% respectively year-on-year. The Group's success in the credit card business was widely recognised with a total of 30 awards presented by VISA International, MasterCard and CUP during the period.

# Wealth Management service – one-stop wealth management solutions

Following the consolidation of its Wealth Management service platform in 2012, the Group continued to provide personalised services and professional financial solutions to meet customers' banking and investment needs. Series of marketing programmes were launched to enhance the brand quality and to increase penetration to quality targeted customers.

The Group's Private Banking business made good progress after its launch in late 2012. In collaboration with business units within the Group as well as BOC and NCB (China), it expanded its customer base through a series of client

acquisition and referral activities. Based on the onestop, holistic service model, a wide range of tailormade products and services in the area of investment management, liquidity management and estate planning were made to meet the needs of Private Banking clients. Consequently, it achieved encouraging results in both the number of Private Banking customers and the value of assets under management.

#### Mass retail customers – introducing i-Free Banking

The Group re-packaged its i-Free Banking services to cater for the basic banking and financial planning service needs of more customers. A selection of savings plans was launched to appeal to younger clientele.

# Distribution channels – strengthening automated banking channels

The Group continued to optimise its distribution channels to meet the needs of customers. At the end of June 2013, the Group's service network in Hong Kong comprised 269 branches, including 141 wealth management centres. It further enhanced its automated banking channels. Voice navigated ATM machine was introduced to aid visually impaired customers to perform automated banking services. The call center offered new services, including the setting of overseas ATM cash withdrawal limits.

In recognition of its well-received electronic platform and outstanding services, the Group received the award of "RMB Business Outstanding Awards 2013 – Outstanding Retail Banking Business – Electronic Banking Business" organised by Metro Finance, Metro Finance Digital and Hong Kong Wen Wei Po. Financial planners of the Group also won the Gold Award and the Best Presentation Award in the "7th HKIB Outstanding Financial Management Planner Awards" presented by The Hong Kong Institute of Bankers.

#### **CORPORATE BANKING**

### **Financial Results**

Corporate Banking recorded a satisfactory growth of HK\$731 million, or 14.2%, in profit before taxation.

Net interest income rose by 21.8%, mainly driven by the increase in average balance of loans and deposits coupled with the increase in loan spread. The growth was partly offset by the decrease in deposit spread. Corporate loans and deposits grew by 8.2% and 8.4% respectively from the end of 2012

Net fee and commission income increased by 6.2%, largely led by the growth in loan commissions and trust services. The increase was, however, partly offset by the decline in commissions from credit cards and payment services.

### **Business operation**

The Group's Corporate Banking business maintained its growth momentum in the first half of 2013. With the aim of becoming the main banker of its customers, the Group continued to provide comprehensive banking services to better serve customers' needs and strengthen customer relationships. At the same time, it focused on expanding industry coverage and customer base through continuous enhancement of its professional expertise in industry management. As a result, corporate loans grew satisfactorily with improved loan pricing. In the custody business, the Group further expanded its client base from different geographical locations. The service spectrum of the cash management business was expanded to include domestic liquidity management capabilities to its crossborder fund sweeping services on BOC's "Global Cash Management System".

# Corporate lending business – 8.2% growth of corporate loans

The Group continued to implement "Total Solutions" for key customers and worked closely with BOC through the "Global Relationship Manager Programme" to provide comprehensive banking services to meet customers' specific demands. Through continuous enhancement of expertise in industry management with better customer segmentation, it was able to expand its client base and improve its risk management. The Group also conducted various market activities to strengthen customer relationships. The Corporate Services Centre was set up to further improve service efficiencies. In the first half of 2013, the Group successfully completed its first RMB cross-border loan to an enterprise in Qianhai. It continued to provide strong support to Chinese enterprises with the strategy of overseas expansion and remained the top mandated arranger in the Hong Kong-Macau syndicated loan market. At the end of June, the Group's balance of corporate loans grew by 8.2% from the end of 2012.

# SME business – "Best SME's Partner Award" for the sixth consecutive year

The Group strived to enhance customer experience for SME customers. In addition to the launch of the

"Integrated Branches for Commercial Business" and "Business Integrated Account" in 2012, it continued to enhance its service capacities by introducing cash management services to customers. The corporate internet banking platform, CBS Online, has been optimised to promote a modern and more user-friendly design of the interface and transaction flow to strengthen customer relationships and attract new customers. In addition, the Group launched a privileged guarantee fee subsidy to support the Special Concessionary Measures of the SME Financing Guarantee Scheme of the Hong Kong Mortgage Corporation Limited. This offer is designed to meet the financing needs of commercial customers and help facilitate the development of SMEs in Hong Kong. In recognition of its long-standing support of SMEs in Hong Kong, the Group received for the sixth consecutive year the "Best SME's Partner Award" from the Hong Kong General Chamber of Small and Medium Business.

### Trade finance – collaboration with BOC to drive growth

The Group continued to enhance product features to meet changing customer needs in cross-border transactions. In close collaboration with BOC, it strengthened the cross-border RMB entrusted payments and entrusted loans businesses and established business relationships with its target customers. The Group also made solid progress in the "Supply-chain Finance" business launched in 2012. At the end of June 2013, the Group's balance of trade finance grew by 13.9% from the end of 2012.

#### Custody service – further expansion of customer base

The Group continued to expand its custody services in the first half of 2013. In addition to those institutions with a Mainland background, the Group established business relationships with a number of new RQFII applicants from Hong Kong, Taiwan and other overseas countries or regions. It continued to expand its client base and successfully secured mandates to provide custody services for RQFII-ETFs, RQFII funds and Qualified Domestic Institutional Investors. In recognition of its outstanding QFII performance, BOCHK was awarded the "Best QFII Custodian" under Regional Specialist in the Asset Servicing Awards 2013 by The Asset Magazine. At the end of June 2013, excluding the RMB fiduciary account for participating banks, total assets under the Group's custody were valued at HK\$617 billion.

# Cash management service – further expansion of service spectrum

The Group continued to strengthen its cross-border cash management service capabilities. While BOC's Taiwan Branch was included as one of the RMB remittance points in the Greater China region, the Group successfully completed the establishment of domestic liquidity management functions to the cross-border fund sweeping services of BOC's "Global Cash Management System" to strengthen its competitive edge as a cross-border fund centre for customers in Hong Kong. In recognition of its outstanding cash management services, BOCHK was presented the "Achievement Award for Best Cash Management Bank in Hong Kong" in the "Asian Banker Transaction Banking Awards 2013".

#### Risk management - proactive measures to contain risks

The Group remained highly vigilant of risks and conducted stringent risk management and credit control to safeguard asset quality. It closely monitored corporate customers and industries that could be adversely affected by the volatile economic environment, including the recent slowdown of economic growth in the Mainland and the withdrawal of stimulus in the US. Rigorous post-lending monitoring measures were put in place to track early negative signs with ad hoc credit review and precautionary measures to be taken in a timely manner.

## **MAINLAND BUSINESS**

#### Financial performance - encouraging growth

The operating environment in the Mainland remained challenging in the first half of 2013. Nevertheless, the Group's Mainland business achieved encouraging growth with optimisation of its asset and liability structure to improve yields. Net operating income increased by 18.2%. Customer deposits and loans registered steady growth of 8.8% and 6.8% respectively from the end of last year. Loan guality remained sound.

# Product and service offerings – continuous enhancement in capabilities

The Group continued to enrich its wealth management product offering to meet the increasing demand for wealth management services. During the period, the Group launched the equity-linked "Preferred Equity" and crude oil-linked "Global Energy" series of structured wealth management products. Meanwhile, another series of wealth management products, "Yixiang", continued to make good contribution to commission income. During the period, NCB

(China) commenced its credit card business in the Mainland. By the end of June 2013, over 2,300 Platinum personal RMB CUP credit cards were issued. The SME business platform was further enhanced with the launch of the "Small Micro-Enterprise Loan Programme" and streamlining of processes to provide more efficient services to SME customers.

#### Distribution channels – enhanced e-Banking function

The Group continued to improve both its personal and corporate e-Banking platforms with the introduction of new services, extension of service hours, real-time processing on holidays and sharing of payment platform of BOC. Meanwhile, enhancements to the "Channel Sharing" model continued with success as the number of new accounts and transaction volume increased notably. The Group also conducted several projects to streamline business processes, in order to shorten turnaround time and enhance customer experience. During the first half of 2013, two new sub-branches of NCB (China) were opened. The Group's total number of branches and sub-branches in the Mainland increased to 38 by the end of June 2013.

#### **TREASURY**

### **Financial Results**

Treasury recorded a decrease of 16.7% in profit before taxation.

Net interest income decreased by 22.0%, mainly due to the decline in average yield on interbank placements and debt securities investments. The decrease was partly offset by the growth in debt securities investments.

Net trading gain was up 52.7%. The increase was mainly caused by the higher gain from foreign exchange related products and the improved mark-to-market changes of certain interest rate instruments.

Net gain on other financial assets was down 72.6%. This was mainly due to the higher gain recorded in the first half of 2012 as the Group captured market opportunities to realise gain on certain debt securities investments.

#### **Business Operation**

#### Proactive investment strategy - staying attuned to risk

The Group continued to manage its banking book investments with a proactive and prudent approach. It closely monitored market changes and adjusted its

investment portfolio to enhance return while staying vigilant of risks. During the period, the Group selectively increased its investments in high-quality financial institutions and corporate bonds and reduced investments in government-related bonds. In terms of geographical exposure, the increased investments were mainly made in the US and Asia. At the same time, the Group increased its holdings in RMB-denominated bonds, which were issued by high-quality Mainland corporates.

#### Product sales – responding to market demand

In line with its customer-centric approach, the Group strived to enhance its core competitive edge by uplifting its transaction capacity, product response efficiency and client marketing. During the period, the Group promptly responded to market conditions and focused on promoting products and services, including structured deposit, equity-linked investment and foreign exchange margin trading, which were well-received by customers. In the bond underwriting business, the Group achieved success in business diversification with underwriting of bond issuance in different denominated currencies, and saw a considerable increase in turnover over the same period last year.

# RMB-related business – the leading CNH (offshore RMB) market player

As the leading market player in the offshore RMB treasury business in Hong Kong, the Group completed the first CNH/USD cross-currency swap transaction using the CNH HIBOR as the pricing benchmark. This transaction served as a tool to hedge against interest rate risks and marked a new milestone in the development of the offshore RMB business. The Group also successfully acted as the arranger for the issuance of the first certificate of deposit with the CNH HIBOR as the benchmark rate, offering the market a wider choice of floating rate debt instruments. BOCHK has been designated as the market maker of the USD/CNH futures for the Chicago Mercantile Exchange Group and Hong Kong Futures Exchange, becoming the only bank that plays such a role in both exchanges.

# RMB clearing service – continuous service enhancement

The Group continued to provide strong support in clearing services. The introduction of RMB fixed deposit service for participating banks, the extension of operating hours for RMB cross-border payments and the adjustment of RMB intra-day Repo limits helped promote stable and healthy development of its RMB clearing services.

#### **INSURANCE**

#### **Financial Results**

The Group's Insurance segment recorded a satisfactory growth of 25.1% in its profit before taxation to HK\$564 million in the first half of 2013.

Net insurance premium income registered a strong growth of 75.4%, as a result of the Group's continuous effort in product enhancement as well as marketing and promotional campaigns. Meanwhile, there were lower policy reserves, as reflected in the changes in net insurance benefits and claims, resulting from higher long-term interest rates. This outweighed the mark-to-market losses of its debt securities which were attributable to market interest rate movements.

### **Business Operation**

# Driving growth through product enhancement and diversified distribution channel

The Group continued to enrich its product offerings. New products were introduced to meet customers' diverse needs. It also actively explored new distribution channels and established partnership with brokerage houses to promote insurance products. This new distribution strategy helped the Group to recruit new customers. The satisfactory performance of the Group's insurance business was reflected in the growth of market ranking. In terms of new business standard premium, BOC Life uplifted its market ranking to No. 1 in the first quarter of 2013.

In recognition of its achievements in the year, BOC Life has been awarded "Best Life Insurance Company of the Year 2013 in Hong Kong" in the "Global Insurance Award" by World Finance, a UK magazine, and the "Outstanding Brand Award 2013" by Economic Digest.

#### RMB insurance products – a prominent provider

The Group continued to maintain its leading position in the Hong Kong RMB insurance market. Products such as the "IncomeGrowth Annuity Insurance Plan", "Target 5 Years Insurance Plan Series", and "RMB Universal Life Insurance Plan" were well received by customers. A new RMB product "Wealth Conquer Universal Life Insurance

Plan" was launched and tailored for distribution through brokerage houses.

In recognition of its outstanding performance in the RMB services, BOC Life was granted the award of "RMB Business Outstanding Awards 2013 – Outstanding Insurance Business" organised by Metro Finance, Metro Finance Digital and Hong Kong Wen Wei Po.

#### **OTHERS**

# Asset management service – expanding geographical foothold

BOCHK Asset Management Limited ("BOCHK AM"), acting as the vehicle for developing the Group's wealth management platform, continued to make solid progress in the first half of 2013. With strong impetus to focus on developing RMB products, it launched a new retail fund "BOCHK All Weather RMB High Yield Bond Fund", which received an overwhelming response from customers. It also launched another retail fund "BOCHK All Weather HK & China Equity Fund" in June 2013. In respect of its investment advisory services, BOCHK AM expanded its geographical foothold by providing advisory services to overseas entities, acting as the investment advisor for two RMB bond funds launched in Taiwan by a local asset management company. It will also be the advisor for the new "FTSE-BOCHK Offshore RMB Bond Index Series" to be jointly developed by BOCHK and FTSE Group.

With regards to its fund management service, BOCHK AM manages RMB, Asian and Global fixed income funds, in addition to Hong Kong equity and global balanced funds and discretionary portfolios for individual and institutional investors.

In recognition of its outstanding performance, BOCHK AM has been granted five prestigious "2012 Best of the Best Awards" by Asia Asset Management.

## RISK MANAGEMENT

## **Banking Group**

#### Overview

The Group believes that sound risk management is crucial to the success of any organisation. In its daily operation, the Group attaches a high degree of importance to risk management and emphasises that a balance must be struck between risk control and business development. The principal types of risk inherent in the Group's

businesses are credit risk, interest rate risk, market risk, liquidity risk, operational risk, reputation risk, legal and compliance risk, and strategic risk. The Group's risk management objective is to enhance shareholder value by maintaining risk exposures within acceptable limits. The Group has a defined risk appetite statement approved by the Board, which is an expression of the types and level of risk that the Group is willing to take in a controllable way in order to achieve its business goals and to meet the expectations of its stakeholders.

#### **Risk Management Governance Structure**

The Group's risk management governance structure is designed to cover all business processes and ensures various risks are properly managed and controlled in the course of conducting business. The Group has a robust risk management organisational structure with a comprehensive set of policies and procedures to identify, measure, monitor and control various risks that may arise. These risk management policies and procedures are regularly reviewed and updated to reflect changes in markets and business strategies. Various groups of risk takers assume their respective responsibilities for risk management.

The Board of Directors, representing the interests of shareholders, is the highest decision-making authority of the Group and has the ultimate responsibility for risk management. The Board, with the assistance of its committees, has the primary responsibility for the formulation of risk management strategies and for ensuring that the Group has an effective risk management system to implement these strategies.

The Risk Committee ("RC"), a standing committee established by the Board of Directors, is responsible for overseeing the Group's various types of risks, approving high-level risk-related policies and monitoring their implementation, reviewing significant or high risk exposures or transactions and exercising its power of veto if it considers that any transaction should not proceed. The Audit Committee assists the Board in fulfilling its role in overseeing the internal control system.

The Chief Executive ("CE") is responsible for managing the Group's various types of risks, approving detailed risk management policies, and approving material risk exposures or transactions within his authority delegated

by the Board of Directors. The Chief Risk Officer ("CRO") assists the CE in fulfilling his responsibilities for the day-to-day management of risks. The CRO is responsible for initiating new risk management strategies, projects and measures that will enable the Group to better monitor and manage new risk issues or areas that may arise from time to time from new businesses, products and changes in the operating environment. The CRO will also take appropriate initiatives in response to regulatory changes. The CRO is also responsible for reviewing material risk exposures or transactions within his delegated authority and exercising his power of veto if he believes that any transaction should not proceed.

Various units of the Group have their respective risk management responsibilities. Business units act as the first line of defence while risk management units, which are independent from the business units, are responsible for the day-to-day management of different kinds of risks. Risk management units have the primary responsibilities for drafting, reviewing and updating various risk management policies and procedures.

The Group's principal banking subsidiaries, Nanyang, NCB (China) and Chiyu, are subject to risk policies that are consistent with those of the Group. Moreover, the Group's non-banking subsidiaries, such as BOC Life, are subject to the Group's risk management requirements. These subsidiaries are required to formulate their respective risk management policies based on the characteristics of their own industries, perform daily risk management responsibilities and report to BOCHK on a regular basis. Risk management units of BOCHK monitor the risk management status of these subsidiaries respectively.

## **Credit Risk Management**

Credit risk is the risk of loss arising from a customer or counterparty that will be unable to or unwilling to meet its contractual obligations. Credit risk exists in the trading book and banking book, on- and off-balance sheet exposures of a bank. It arises principally from the lending, trade finance and treasury businesses, and covers inter-bank transactions, foreign exchange and derivative transactions as well as investments in bonds and securities. The Chief Credit Officer, who reports directly to the CRO, takes charge of credit risk management and is also responsible for the control of credit risk exposure of subsidiaries in line with the credit risk management

principles and requirements set by the Group. The Chief Analytics Officer, who also reports directly to the CRO, is responsible for the development and maintenance of internal rating models and establishing the rating criteria.

For advances, different credit approval and control procedures are adopted according to the level of risk associated with the customer, counterparty or transaction. The Credit Risk Assessment Committee, comprising experts from credit and other functions, is responsible for making an independent assessment of all credit facilities which require the approval of Deputy Chief Executives ("DCE") or above. Credit applications for non-retail exposures are independently reviewed and objectively assessed by risk management units. Obligor ratings (in terms of probability of default) and facility ratings (in terms of loss given default) are assigned to these portfolios to support credit approval. Retail internal rating systems are deployed in the risk assessment of retail credit transactions, including small business retail exposures, residential mortgage loans, personal loans and credit cards. Loan grades, obligor and facility ratings as well as loss estimates (if applicable) are used to support credit approval.

The Group also uses loan grades, obligor ratings and loss estimates (if applicable) to support credit monitoring, analysis and reporting. For non-retail exposures, more frequent rating review and closer monitoring are required for higher-risk customers. For retail exposures, monthly updated internal ratings and loss estimates are used for credit monitoring on a portfolio basis. More comprehensive review is required for obligors being identified under highrisk pools. In the first half of 2013, the Group continues to adopt loan grading criteria which divide credit assets into 5 categories with reference to HKMA's guidelines. The Risk Management Department ("RMD") provides regular credit management information reports and ad hoc reports to the Management Committee ("MC"), RC and Board of Directors to facilitate their continuous monitoring of credit risk. In addition, credit concentration risk is identified by industry, geography, customer and counterparty risk. The Group monitors changes to counterparties credit risk, quality of the credit portfolio and risk concentrations, and reports regularly to the Group's management.

The Group employs a credit master scale for internal rating purpose that can be mapped to Standard & Poor's external ratings. The credit master scale for internal rating

is in compliance with the Banking (Capital) Rules under the Hong Kong Banking Ordinance on internal rating structure.

For investments in debt securities and securitisation assets. the obligor ratings or external credit ratings, assessment of the underlying assets and credit limits setting on customer/security issuer basis are used for managing credit risk associated with the investment. For derivatives, the Group sets customer limits to manage the credit risk involved and follows the same approval and control processes as applied for advances. On-going monitoring and stop-loss procedures are established. The methodology and assumptions used for impairment assessments are reviewed regularly. In evaluating impairment of asset backed securities ("ABS") and mortgage backed securities ("MBS"), the Group continued to use a significant decline in market price and credit deterioration of the underlying assets to be the key indicators of impairment. The Group also considered other objective evidences of impairment, taking into account the impact of liquidity on market prices and the movement in loss coverage ratios of individual ABS and MBS held by the Group.

#### **Market Risk Management**

Market risk refers to the risk of losses arising from adverse movements in the value of foreign exchange, commodity, interest rate and equity positions held by the Group due to the volatility of financial market price (debt security price/interest rate, foreign exchange rate, equity price, commodity price). The Group adopts a moderate market risk appetite to achieve a balance between risk and return. The Group's objective in managing market risk is to secure healthy growth of the treasury business, by effective management of potential market risk in the Group's business, according to the Group's overall risk appetite and strategy of treasury business on the basis of a well established risk management regime and related management measures.

In accordance with the Group's corporate governance principles in respect of risk management, the Board and RC, senior management and functional departments/ units perform their duties and responsibilities to manage the Group's market risk. The Market Risk Management Division of the RMD is mainly responsible for managing market risk, assisting senior management to perform their

day-to-day duties, independently monitoring the market risk profile and compliance of management policies and limits of the Group and BOCHK, and ensuring that the aggregate and individual market risks are within acceptable levels.

The Group's market risk management covers BOCHK and its subsidiaries. The Group establishes consistent market risk management policies to regulate BOCHK's and subsidiaries' market risk management; meanwhile, the Group sets up the Group VAR and stress test limits, which are allocated and monitored across the Group, according to the subsidiaries' business requirements and risk tolerance levels. In line with the requirements set in the Group policy, the management of subsidiaries may, subject to prior consent by BOCHK, formulate the detailed policies and procedures and are responsible for managing their daily market risk. The subsidiaries set up independent risk monitoring teams to monitor daily market risk and limit compliance, and submit management information and reports to BOCHK on a regular basis.

The Group sets up market risk indicators and limits to identify, measure, monitor and control market risk. Major risk indicators and limits include but are not limited to VAR, Stop Loss, Open Position, Stress Testing and Sensitivity Analysis (Basis Point Value, Greeks), etc. To meet management requirements, major risk indicators and limits are classified into four levels, and are approved by the RC, MC, CRO and the DCE in charge of the treasury business or the head of the respective business unit respectively. Treasury business units of BOCHK and subsidiaries (as for Group Limit) are required to conduct their business within approved market risk indicators and limits.

The Group uses the VAR to measure and report general market risks to the RC and senior management on a periodic basis. The Group adopts a uniformed VAR calculation model, using historical simulation approach and 2-year historical data, to calculate the VAR of the Group and subsidiaries over 1-day holding period with 99% confidence level, and sets up the VAR limit of the Group and subsidiaries.

The Group adopts back-testing to measure the accuracy of VAR model results. The back-testing compares the

calculated VAR figure of market risk positions of each business day with the actual and hypothetical revenues arising from those positions on the next business day. Generally speaking, the number of back-testing exceptions in a rolling 12-month period will not exceed four times, given a 99% confidence level. BOCHK conducts back-testing for VAR model results on a monthly basis.

#### **Interest Rate Risk Management**

Interest rate risk means the risks to a bank's earnings and economic value arising from adverse movements in interest rate and term structures of the bank's asset and liability positions. The Group's interest rate risk exposures are mainly structural. The major types of interest rate risk from structural positions are:

- Repricing risk: mismatches in the maturity or repricing periods of assets and liabilities that may affect net interest income;
- Basis risk: different pricing basis for different transactions resulting that the yield on assets and cost of liabilities may change by different amounts within the same repricing period;
- Yield curve risk: non-parallel shifts in the yield curve that may have an adverse impact on net interest income or economic value;
- Option risk: exercise of the options embedded in assets, liabilities or off-balance sheet items that can cause a change in the cash flows of assets and liabilities.

The Group's risk management framework applies also to interest rate risk management. The Assets and Liabilities Management Committee ("ALCO") exercises its oversight of interest rate risk in accordance with the "BOCHK Group Banking Book Interest Rate Risk Management Policy" approved by RC. RMD (Interest Rate and Liquidity Risk Management) is responsible for interest rate risk management. With the cooperation of the Asset and Liability Management Division of Financial Management Department and Investment Management, RMD assists the ALCO to manage day-to-day interest rate risk positions. Its roles include, but are not limited

to, the formulation of management policies, selection of methodologies, setting of risk indicators and limits, assessment of target balance sheet, monitoring of the compliance with policies and limits, and submission of interest rate risk management reports to the senior management and RC, etc.

The Group sets out interest rate risk indicators and limits to identify, measure, monitor and control interest rate risk. The indicators and limits include, but are not limited to, repricing gap limits, basis risk, duration, price value of a basis point (PVBP), Greeks, net interest income sensitivity ratio, economic value sensitivity ratio (including sub-limit for AFS securities), etc. The indicators and limits are classified into three levels, which are approved by the RC, ALCO and CRO respectively. Risk-taking business units are required to conduct their business within the boundary of the interest rate risk limits. Before launching a new product or business in the banking book, the relevant departments are required to go through a risk assessment process, which includes the assessment of underlying interest rate risk and consideration of the adequacy of current risk monitoring mechanism. Any material impact on interest rate risk noted during the risk assessment process will be submitted to the RC for approval.

Net interest income sensitivity ratio and economic value sensitivity ratio assess the impact of interest rate movement on the Group's net interest income and capital base. They are the Group's key interest rate risk indicators. The former assesses the impact of interest rate movement on net interest income as a percentage to projected net interest income for the year. The latter assesses the impact of interest rate movement on economic value (i.e. the present value of cash flows of assets, liabilities and off-balance sheet items discounted using market interest rate) as a percentage to the latest capital base. Limits are set by the RC on these two indicators to monitor and control the Group's banking book interest rate risk.

The Group uses scenario analyses and stress tests to assess the banking book interest rate risk that the Group would face under adverse circumstances. Scenario analyses and stress tests are also devised to assess the impact on net interest income and economic value arising from the optionality of savings deposits, the prepayment of mortgage loans and the prepayment of debt securities with embedded options.

#### Liquidity Risk Management

Liquidity risk is the risk that banks fail to provide sufficient funds to grow assets or pay due obligations, and need to bear an unacceptable loss. The Group maintains sound liquidity risk appetite to provide stable, reliable and adequate sources of cash to meet liquidity needs under normal circumstances or stressed scenarios; and to survive with net positive cumulative cash flow in extreme scenarios without requesting HKMA to act as the lender of last resort.

The Group's liquidity risk management objective is to effectively manage the liquidity of on-balance sheet and off-balance sheet items with reasonable cost based on the liquidity risk appetite to achieve sound operation and sustainable profitability. Customer deposits are the Group's primary source of funds. To ensure stable and sufficient source of funds are in place, the Group actively attracts new deposits, keeps the core deposit and obtains supplementary funding from the interbank market or by issuing bills in the capital market. According to different term maturities and the results of funding needs estimated from stressed scenarios, the Group adjusts its asset structure (including loans, bonds investment, interbank placement, etc.) to maintain sufficient liquid assets in support of normal business needs and ensure its ability to raise enough funds at reasonable cost to serve external claims in case of emergency. The Group is committed to diversify the source of funds and the use of funds to avoid excessive concentration of assets and liabilities and prevent triggering liquidity risk due to the break of funding strand when problem occurred in one concentrated funding source. The Group has established intra-group liquidity risk management guideline to manage the liquidity funding among different entities within the Group, and to restrict their reliance of funding on each other. The Group also pays attention to manage liquidity risk created by off-balance sheet activities, such as loan commitments, derivatives, options and other complex structured products. The Group has an overall liquidity risk management strategy to cover the liquidity management of foreign currency assets and liabilities, collaterals, intraday liquidity, intra-group liquidity, the liquidity risk arising from other risks, etc., and has formulated corresponding contingency plan.

The RC is the decision-making authority of liquidity risk management, and assumes the ultimate responsibility of liquidity risk management. As authorised by RC, ALCO exercises its oversight of liquidity risk and ensures the daily operations of the Group are in accordance with risk appetite and policies as set by RC. RMD (Interest Rate and Liquidity Risk Management) is responsible for overseeing the Group's liquidity risk. It cooperates with the Asset and Liability Management Division of Financial Management Department, Investment Management, etc. to assist the ALCO to perform liquidity management functions according to their specific responsibilities.

The Group established liquidity risk management indicators and limits to identify, measure, monitor and control liquidity risk on daily basis. Such indicators and limits include, but are not limited to liquidity ratio, loan-to-deposit ratio, Maximum Cumulative Outflow and liquidity buffer asset portfolio. The Group applies cash flow analysis to assess the Group's liquidity condition under normal conditions and also performs liquidity stress test (including institution specific, world wide crisis and combined crisis) and other methods at least on monthly basis to assess the Group's capability to withstand various severe liquidity crises. Also, the Assets and Liabilities Management System is developed to provide data and the preparation for regular management reports to facilitate liquidity risk management duties.

In accordance with the requirements of Supervisory Policy Manual LM-2 "Sound Systems and controls for Liquidity Risk Management" issued by the HKMA in 2011, the Group has embarked on refining the behavior model and assumptions of existing cash flow analysis and stress test to enhance the Group's cash flow analysis under both normal and stressed conditions. In cash flow analysis under normal circumstances, refinements have been made

to assumptions relating to on-balance sheet items (such as customer deposits) and off-balance sheet items (such as loan commitments). In the liquidity stress test, a new combined scenario which is a combination of institution specific and world wide crisis has been set up to assess the Group's capability to withstand a more severe liquidity crisis, with a more stringent set of assumptions being adopted. In addition, the Group has a policy in place to maintain an asset buffer portfolio which includes high quality marketable securities to ensure funding needs even under stressed scenarios. A contingency plan is being established which details the conditions to trigger the plan based on stress test results and early warning indicators, the action plans and relevant procedures and responsibility of various departments.

The Group's liquidity risk management also covers new product or business development. Before launching a new product or business, the relevant departments are required to go through a risk assessment process, which includes the assessment of underlying liquidity risk and consideration of the adequacy of the current risk management mechanism. Any material impact on liquidity risk noted during the risk assessment process will be reported to RC for approval.

The Group has established a set of uniform liquidity risk management policies which serve as standards and guidance to all the Group's members for liquidity risk management. On the basis of the Group's uniform policy, each of the subsidiaries develops its own liquidity management policies according to its own characteristics (subject to approval by BOCHK), and assumes its own liquidity risk management responsibility. Subsidiaries are required to report their respective liquidity positions on a regular basis to RMD (Interest Rate and Liquidity Risk Management) of BOCHK, which consolidates such information and evaluates group-wide liquidity risk.

#### **Operational Risk Management**

Operational risk is the risk of loss resulting from inadequate or failed internal process, staff and information technology system, or from external events. The risk is inherent in every aspect of business operations and confronted by the Group in its day-to-day operational activities.

The Group has implemented the "Three Lines of Defence" for its operational risk management. All departments or functional units as the first line of defence are the first parties responsible for operational risk management, and carry out the duties and functions of self risk control in the process of business operation through self assessment and self enhancement. The Operational Risk and Compliance Department ("OR&CD"), together with certain specialist functional units in relation to operational risk management within the Group, including the Human Resources Department, Information Technology Department, Corporate Services Department, Financial Management Department and General Accounting & Accounting Policy Department (collectively known as "Specialist functional units"), are the second line of defence. They are responsible for assessing and monitoring the operational risk conditions in the first line of defence, and providing them with guidance. The OR&CD, being independent from the business units, is responsible for assisting the Management in managing the Group's operational risk, including the establishment and review of the operational risk management policy and framework, designing the operational risk management tools and reporting mechanism, and assessing and reporting the overall operational risk position to the Management and RC. Specialist functional units are required to carry out their managerial duties of the second line defence with respect to some specific aspects of operational risk and its related issues. Besides taking charge of operational risk management in their own units, these units are also required to provide other units with professional advice/training in respect of certain operational risk categories and to lead the Group-wide operational risk management. Group Audit is the third line of defence which provides independent assessment to the effectiveness and adequacy of the operational risk management framework and is required to conduct periodic audit of the operational risk management

activities of various departments or functional units within the Group regarding their compliance and effectiveness and to put forward recommendations for remedial actions.

The Group has put in place an effective internal control process which requires the establishment of policies and control procedures for all the key activities. The Group adheres to the fundamental principle of proper segregation of duties and authorisation. The Group adopts various operational risk management tools or methodologies such as key risk indicators, self-assessment, operational risk events reporting and review to identify, assess, monitor and control the risks inherent in business activities and products, as well as purchase of insurance to mitigate unforeseeable operational risks. Business continuity plans are established to support business operations in the event of an emergency or disaster. Adequate backup facilities are maintained and periodic drills are conducted.

### **Reputation Risk Management**

Reputation risk is the risk that negative publicity about the Group's business practices, whether genuine or not, will cause a potential decline in the customer base, or lead to costly litigation or revenue decrease. Reputation risk is inherent in other types of risk and every aspect of business operation and covers a wide spectrum of issues.

In order to mitigate reputation risk, the Group has formulated and duly followed its Reputation Risk Management Policy. The policy aims to prevent and manage reputation risk proactively at an early stage when an incident occurs. Since reputation risk is often caused by various types of operational and strategic issues that negatively impact the trust and perception of the Group, all operational and key risks identified are assessed through the established Key Control Self-Assessment framework, including risk assessment tools, to evaluate the severity of their impact on the Group, including the damage to reputation.

In addition, the Group has put in place a comprehensive framework to continuously monitor reputation risk incidents in the financial industry. This continuous monitoring enables the Group to effectively manage, control and mitigate any potential adverse impact from an incident. The Group also adopts robust disclosure practices to keep our stakeholders informed at all times, which helps build confidence in the Group and establish a strong public image.

#### Legal and Compliance Risk Management

Legal risk is the risk that unenforceable contracts, lawsuits or adverse judgments may disrupt or otherwise negatively affect the operations or financial conditions of the Group. Compliance risk is the risk of legal or regulatory sanctions, financial losses or losses in reputation the Group may suffer as a result of its failure to comply with all applicable laws and regulations. Legal and compliance risks are managed by the OR&CD, which reports directly to the CRO. All legal matters are handled by the Legal Services Centre ("LSC"), which reports to the Chief Operating Officer. The OR&CD is responsible for legal risk management of the Group with support rendered by the LSC. As part of the Group's corporate governance framework, the policy for the management of legal and compliance risk is approved by the RC as delegated by the Board.

## **Strategic Risk Management**

Strategic risk generally refers to the risks that may induce some current or future negative impacts on the earnings, or capital or reputation or market position of the Group because of poor business decisions, improper implementation of decisional strategies and lack of response to the market. The Board reviews and approves the strategic risk management policy. Key strategic issues have to be fully evaluated and properly endorsed by the senior management and the Board.

The Group regularly reviews its business strategies to cope with the latest market situation and developments.

#### **Capital Management**

The major objective of the Group's capital management is to maximise total shareholders' return while maintaining a capital adequacy position in relation to the Group's overall risk profile. The ALCO periodically reviews the Group's capital structure and appropriately adjusts the capital mix to maintain an optimal balance between risk, return and capital adequacy.

To comply with the HKMA's requirements as stated in the Supervisory Policy Manual "Supervisory Review Process", the Group adopts the internal capital adequacy assessment process ("ICAAP") and reviews it annually. Based on the HKMA's guidelines on Pillar II, ICAAP has been initiated to assess the extra capital needed to cover the material risks not captured or not adequately captured under Pillar I, and therefore minimum Common Equity Tier 1 capital ratio, minimum Tier 1 capital ratio and the minimum Total capital ratio are determined. Meanwhile, operating ranges for the aforementioned capital ratios have also been established which enable the flexibility for future business growth and efficiency of capital utilisation.

The Banking (Capital) (Amendment) Rules 2012 ("BCAR 2012") came into operation on 1 January 2013. The BCAR 2012 mainly addressed the revision to both the minimum capital ratio requirement (in terms of expanding the existing capital adequacy ratio into three ratios, namely, a Common Equity Tier 1 capital ratio, a Tier 1 capital ratio and a Total capital ratio) and the definition of regulatory capital. In addition, the BCAR 2012 included the enhancements to the counterparty credit risk framework and amendments on the capital treatment for certain trade financing activities and securities financing transactions. The Group's capital position remains strong after the implementation of the BCAR 2012.

#### **Stress Testing**

The Group supplements the analysis of various types of risks with stress testing. Stress testing is a risk management tool for estimating risk exposures under

stressed conditions arising from extreme but plausible market or macroeconomic movements. These tests are conducted on a regular basis by the Group's various risk management units in accordance with the principles stated in the Supervisory Policy Manual "Stress-testing" published by the HKMA. The ALCO monitors the results against the key risk limit approved by the RC. The Financial Management Department reports the combined stress test results of the Group to the RC and Board regularly.

#### **BOC** Life

BOC Life's principal business is the underwriting of long-term insurance business in life and annuity (Class A), linked long term business (Class C) and retirement scheme management category III (Class I) in Hong Kong. Major types of risk arising from the BOC Life's insurance business are insurance risk, interest rate risk, liquidity risk and credit risk. BOC Life closely monitors these risks and reports to its RC on a regular basis. The key risks of its insurance business and related risk control process are as follows:

## **Insurance Risk Management**

BOC Life is in the business of insuring against the risk of mortality, morbidity, disability, critical illness, accidents and related risks. These risks are managed through the application of underwriting policies and reinsurance arrangements.

The underwriting strategy is intended to set premium pricing at an appropriate level that corresponds with the underlying exposure of the risks underwritten. Screening processes, such as the review of health condition and family medical history, are also included in BOC Life's underwriting procedures.

The reinsurance arrangement helps to transfer the insurance risk associated with the insurance contracts to the third party. It does not, however, discharge BOC Life's liability as the primary insurer. If a reinsurer fails to pay a claim for any reasons, BOC Life remains liable for

the payment to the policyholder. The creditworthiness of reinsurers is considered by reviewing the reinsurers' financial strength prior to finalisation of any reinsurance contract. BOC Life directs its reinsurance placement policy and assesses the creditworthiness of all reinsurers and intermediaries by reviewing credit grades provided by rating agencies and other publicly available financial information. BOC Life also monitors the recoverability of its reinsurance assets on an ongoing basis. It maintains records of the payment history for significant contract holders, with whom it conducts regular business.

For details of the Group's Insurance Risk Management, please refer to Note 3.4 to the Interim Financial Information.

#### **Interest Rate Risk Management**

An increase in interest rates may result in the depreciation of the value of BOC Life's bond portfolio. It may also result in customers accelerating surrenders. A decrease in interest rates may result in an increase in insurance liability and an inability to adequately match guarantees or lower returns leading to customer dissatisfaction. BOC Life manages the asset liability matching of its portfolios within an asset liability management (ALM) framework that has been developed to achieve investment returns that match its obligations under insurance contracts.

#### Liquidity Risk Management

Liquidity risk is the risk of not being able to fund increases in assets or meet obligations as they fall due without incurring unacceptable loss. BOC Life's asset liability matching framework includes cash flow management to preserve liquidity to match policy payout from time to time. In the normal course of BOC Life's business, new

business and in-force policies premiums generate constant cash inflows and, as a result, the portfolios also grow gradually to meet future liquidity requirements.

## **Credit Risk Management**

BOC Life has exposure to credit risk, which is the risk that a customer or counterparty will be unable to or unwilling to meet a commitment that they have entered into. Key areas to which BOC Life's insurance business is exposed include:

- Default risk of bond issuers or the counterparties of structured products
- Credit spread widening as a result of credit migration (downgrade)
- Re-insurers' share of insurance unpaid liabilities
- Amounts due from re-insurers in respect of claims already paid
- Amount due from insurance contract holders
- Amount due from insurance intermediaries

BOC Life manages credit risk by placing limits on its exposure to each investment counterparty or group of counterparties. Such limits are subject to annual or more frequent review by the Management.

In order to enhance its credit risk management, BOC Life has strengthened its communication with the Investment Management of the Group while closely monitoring and updating the established Bonds Issuers Disposal and Watch Lists to ensure consistency with the Group's credit risk management and investment strategy.