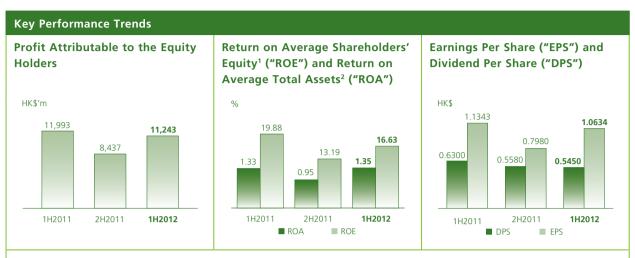
### FINANCIAL PERFORMANCE AND CONDITION IN BRIEF

The following table is a summary of the Group's key financial results for the first half of 2012 in comparison with the previous two half-yearly periods.



### Profit attributable to the equity holders

• Profit attributable to the equity holders decreased by 6.3% to HK\$11,243 million year-on-year. The decrease was largely due to the net recovery from the underlying collateral of the Lehman Brother Minibonds<sup>3</sup> in the first half of 2011. Should this factor be excluded, it would have increased by 16.2% year-on-year.

### Solid return with sustainable growth

- ROE was 16.63%, down 3.25 percentage points year-on-year. Excluding the impact of the Lehman Brothers-related products in the first half of 2011, ROE would have risen by 0.74 percentage point.
- ROA was 1.35%, up 0.02 percentage point year-on-year. Excluding the impact of the Lehman Brothers-related products in the first half of 2011, ROA would have increased by 0.28 percentage point.

### Consistent return to shareholders

• EPS was HK\$1.0634. Interim dividend per share was HK\$0.545.



### Loan-to-deposit ratio at a healthy level

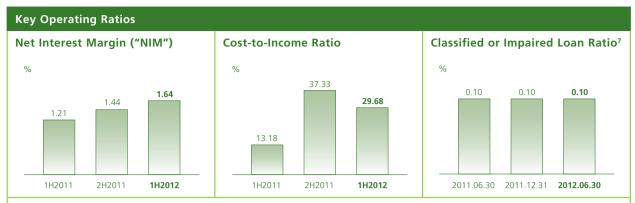
• Advances to customers increased by 6.8% while deposits from customers grew by 3.4% from the end of 2011. Loan-to-deposit ratio was 63.00%.

### Solid capital position to support business growth

• CAR improved to 17.43%, while core capital ratio stood at 12.96%.

### Sound liquidity position

• Average liquidity ratio improved to 39.87%.



### Further improvement in NIM in the first half of 2012

• NIM was 1.64%, up 43 basis points year-on-year. During the period, the return on RMB business improved and the diluting effect of the Group's RMB clearing bank<sup>8</sup> business eased. NIM on non-local RMB business improved slightly year-on-year.

### Stringent cost control

• Cost-to-income ratio was 29.68%. Excluding the impact of the Lehman Brothers-related products in the first half of 2011, it would have fallen 2.24 percentage points year-on-year.

### Solid loan quality

- Classified or impaired loan ratio remained low at 0.10%. Formation of new classified loans remained at a low level.
- 1. Return on Average Shareholders' Equity as defined in "Financial Highlights".
- 2. Return on Average Total Assets as defined in "Financial Highlights".
- 3. The final resolution of certain series of Lehman Brothers Minibonds was announced on 15 June 2011. The net amount of HK\$2,854 million recovered by the Group from the underlying collateral of the Lehman Brothers Minibonds, after deducting the ex gratia payments and provision for trustee expenses, was credited to operating expenses in the first half of 2011. The net recovery together with the expenses of Lehman Brothers-related products is referred to as "impact of Lehman Brothers-related products" in the Management's Discussion and Analysis.
- 4. The deposit base also includes structured deposits reported as "Financial liabilities at fair value through profit or loss".
- 5. Capital adequacy ratio is 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 bases of regulatory capital calculation for credit risk, market risk and operational risk are described in Note 3.5 to the Interim Financial Information.
- 6. The average liquidity ratio is calculated as the simple average of each calendar month's average liquidity ratio of BOCHK for the period.
- 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.
- 8. Since December 2003, the Bank has been appointed as the clearing bank to provide RMB clearing services in Hong Kong.

# ECONOMIC BACKGROUND AND OPERATING ENVIRONMENT

In the first half of 2012, the state of the global economy remained volatile. Economic growth indicators in general appeared lacklustre. The sovereign debt crisis in the Eurozone continued to pose a serious risk to the global financial market. The recovery of the US economy also assumed a slower pace as a result of uncertainties emanating from its own fiscal policies and the Euro crisis. In the Mainland, slower economic growth for the whole year was generally expected as the GDP growth moderated from 9.2% in the year 2011 to 7.8% in the first half of 2012.

In Hong Kong, the economic growth showed signs of losing steam. In the first half of 2012, the GDP grew by 0.9% over a year earlier. Inflationary pressure moderated somewhat, with the year-on-year Composite CPI increasing by 3.7% in June 2012.

After a rather quiet second half of 2011, the local residential property market revived since March 2012. The average price of private domestic properties rose by 10.5% in the first half of 2012. However, investment sentiments in the local stock market turned weak largely because of the threat of the lingering European debt crisis and the expectation of a slower economic growth in the Mainland. As a result, the market turnover in the first half of 2012 declined by 22.3% year-on-year.

Loan demand slowed down in the first half of 2012 compared to that of 2011. Meanwhile, banks' funding pressure for the HKD and USD eased somewhat. Market interest rates remained low. Average 1-month HIBOR was 0.32% in the first half of 2012, up 0.14 percentage point year-on-year. The market competition for RMB deposits intensified as the deployment channels of RMB funds broadened remarkably, thus fuelling the rise in related deposit costs.

During the first half of 2012, the liquidity of the offshore RMB market in Hong Kong has been enhanced under the new regulations announced by the HKMA. These include the broadening of the definition of RMB liquid assets for the purpose of calculating the RMB risk management limit and the raising of the RMB net open position limit. The RMB risk management limit has been subsequently replaced with a RMB liquidity ratio. These changes allow banks more flexibility and liquidity to facilitate offshore RMB transactions and lending.

In short, owing to various external uncertainties, the operating environment for the banking industry remained highly challenging in the first half of 2012. Banks were faced with intensifying competition while low interest spreads continued to constrain the improvement of banks' net interest margin. At the same time, the slowdown of certain economic activities meant that there was lower credit demand. On a positive note, the further expansion of the offshore RMB market has been presenting the banking sector with new business opportunities.

The outlook for the second half of 2012 is expected to consist of a combination of challenges and opportunities. On the one hand, the global economy would remain highly uncertain. The Hong Kong economy would still be subject to risks coming from the unresolved European debt crisis and the likely slower growth of the Mainland economy. On the other hand, the Mainland's growth stabilising policies would probably give rise to more business opportunities in Hong Kong. The further development of the RMB would give impetus to the expansion of the offshore RMB banking business.

### **CONSOLIDATED FINANCIAL REVIEW**

### Financial Highlights

HK\$'m	Half-year ended	Half-year ended	Half-year ended
	30 June 2012	31 December 2011	30 June 2011
Net operating income before impairment allowances	18,165	15,720	15,126
Operating expenses	(5,391)	(5,869)	(1,993)
Operating profit before impairment allowances	12,774	9,851	13,133
Operating profit after impairment allowances	12,666	9,375	13,103
Profit before taxation	13,825	10,093	14,587
Profit attributable to the equity holders of the Company	11,243	8,437	11,993

The Group recorded encouraging financial results in the first half of 2012. This was made possible by the solid growth of its traditional businesses, increased contribution from its RMB businesses as well as prudent cost control. The Group fully capitalised on its core competencies, enhanced its service capabilities and captured new business opportunities, particularly from offshore RMB businesses. At the same time, it maintained stringent risk management in view of the more challenging environment.

In the first half of 2012, the Group's net operating income before impairment allowances increased by HK\$3,039 million or 20.1% year-on-year to HK\$18,165 million. The increase in income was broad-based. Net interest income was the major driver, the growth of which was primarily attributable to loan growth with improved yield and the better deployment of RMB funds. Net fee and commission income, net trading gain from foreign exchange as well as income of the Group's insurance segment also registered growth. Operating expenses increased sharply, largely

due to the net recovery from the underlying collateral of the Lehman Brothers Minibonds in the first half of 2011. Operating profit before impairment allowances decreased by 2.7%. Excluding the impact of the Lehman Brothers-related products, it would have increased by 24.0%. The Group recorded a modest amount of net charge of impairment allowances. The net gain on property revaluation fell year-on-year. Profit attributable to the equity holders decreased by HK\$750 million, or 6.3%, to HK\$11,243 million. Excluding the impact of the Lehman Brothers-related products, profit attributable to the equity holders would have increased by 16.2%.

As compared to the second half of 2011, the Group's net operating income before impairment allowances rose by HK\$2,445 million, or 15.6%. The growth in income was again broad-based. Net gain on other financial assets also rose. Meanwhile, net charge of impairment allowances decreased while net gain on property revaluation increased. As a result, profit attributable to the equity holders increased by HK\$2,806 million, or 33.3%.

#### **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 percentage amounts	Half-year ended	Half-year ended	Half-year ended
	30 June 2012	31 December 2011	30 June 2011
Interest income	17,772	16,775	15,156
Interest expense	(5,153)	(5,001)	(4,951)
Net interest income	12,619	11,774	10,205
Average interest-earning assets Net interest spread Net interest margin*	1,544,663	1,626,293	1,698,704
	1.53%	1.36%	1.14%
	1.64%	1.44%	1.21%

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

Compared to the first half of 2011, the Group's net interest income increased by HK\$2,414 million or 23.7%. The increase was mainly driven by the widening of net interest margin. Average interest-earning assets dropped by HK\$154,041 million or 9.1% year-on-year, mainly due to the decrease in participating banks' RMB deposits with the clearing bank. Net interest margin was 1.64%, up 43 basis points. The increase was mainly attributable to the improved return on the offshore RMB business and the eased dilution by the Group's RMB clearing bank business while NIM on non-local RMB business improved slightly year-on-year. The return on the offshore RMB business improved with the increased deployment of RMB funds in RMB loans and advances, interbank placements and

bonds. In addition, the improved loan pricing and the higher average balance of loans also contributed to the NIM improvement. However, this was partly offset by the higher deposit costs amid keen market competition.

The Group's RMB clearing bank business had a lower average spread than other businesses, which dragged the overall net interest margin in previous periods. In line with the new developments in offshore RMB market, coupled with the introduction of the Fiduciary Account scheme, participating banks reduced their RMB deposits with the clearing bank. As a result, the diluting effect of the Group's RMB clearing bank business on net interest margin became insignificant in the first half of 2012.

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

	Half-year ended 30 June 2012		· ·		Half-year ended 30 June 2011	
	Average	Average	Average	Average	Average	Average
	balance	yield	balance	yield	balance	yield
ASSETS	HK\$'m	%	HK\$'m	%	HK\$'m	%
Balances and placements with banks						
and other financial institutions	388,424	2.42	515,745	1.81	628,593	1.21
Debt securities investments	444,859	2.18	417,015	2.33	423,344	2.36
Loans and advances to customers	696,697	2.34	678,863	2.07	630,343	2.02
Other interest-earning assets	14,683	1.55	14,670	1.23	16,424	1.74
Total interest-earning assets	1,544,663	2.31	1,626,293	2.05	1,698,704	1.80
Non interest-earning assets	184,455	-	162,734	_	160,827	_
Total assets	1,729,118	2.06	1,789,027	1.86	1,859,531	1.64
	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	190,083	0.71	317,392	0.60	441,309	0.89
Current, savings and fixed deposits	1,066,697	0.77	1,045,822	0.69	1,000,360	0.53
Subordinated liabilities	28,640	1.29	28,494	1.94	27,094	2.11
Other interest-bearing liabilities	42,953	0.95	36,937	0.62	41,910	0.40
Total interest-bearing liabilities	1,328,373	0.78	1,428,645	0.69	1,510,673	0.66
Non interest-bearing deposits	87,466	_	71,943	_	67,777	_
Shareholders' funds* and non interest-bearing liabilities	313,279	_	288,439	_	281,081	_
Total liabilities	1,729,118	0.60	1,789,027	0.55	1,859,531	0.54

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

Compared to the second half of 2011, net interest income increased by HK\$845 million or 7.2% primarily due to the growth in net interest margin. Net interest margin was 1.64%, up 20 basis points. The increase in net interest margin was mainly due to the improvement in the return of the offshore RMB business. The diluting effect of the

Group's clearing bank business eased further as RMB funds from participating banks continued to decline while NIM on non-local RMB business also improved. There was also an improvement in loan pricing while rising deposit costs continued to put pressure on the net interest spread.

#### Net Fee and Commission Income

HK\$'m	Half-year ended 30 June 2012	Half-year ended 31 December 2011	Half-year ended 30 June 2011
Credit cards	1,542	1,550	1,337
Securities brokerage	1,054	1,297	1,485
Loan commissions	909	572	588
Insurance	596	487	610
Bills commissions	370	436	418
Payment services	325	334	303
Funds distribution	232	161	176
Trust and custody services	179	225	154
Safe deposit box	118	104	107
Currency exchange	69	80	76
Others	214	180	178
Fee and commission income	5,608	5,426	5,432
Fee and commission expenses	(1,506)	(1,579)	(1,446)
Net fee and commission income	4,102	3,847	3,986

Net fee and commission income grew by HK\$116 million, or 2.9%, year-on-year to HK\$4,102 million, primarily due to the growth of fee and commission income from loans, credit card business and funds distribution. There was a decrease of 29.0% in commission income from securities brokerage in a more sluggish local stock market. Loan commissions grew strongly by 54.6%. Fee income from the credit card business grew by 15.3%, driven by the increase of 10.8% and 16.8% respectively in cardholder spending and merchant acquiring volume. Commission from funds distribution rose substantially by 31.8% with the Group's strong performance in the distribution of RMB Qualified Foreign Institutional Investors ("ROFII")

funds and its continuous effort in enriching its product shelf to meet customers' needs. Commission income from trust and custody services as well as payment services also registered satisfactory growth. Fee and commission expenses increased by HK\$60 million, or 4.1%, mainly due to the increase in credit card-related expenses.

Compared to the second half of 2011, net fee and commission income grew by HK\$255 million or 6.6%. There was growth in the commission income from loans, insurance and funds distribution. Fee and commission income from securities brokerage, bills and trust and custody services declined.

### Net Trading Gain/(Loss)

HK\$'m	Half-year ended 30 June 2012	Half-year ended 31 December 2011	Half-year ended 30 June 2011
Foreign exchange and foreign exchange products Interest rate instruments and items under	936	768	662
fair value hedge	305	16	(4)
Equity instruments	104	50	32
Commodities	63	115	71
Net trading gain	1,408	949	761

Net trading gain was HK\$1,408 million, increasing by HK\$647 million, or 85.0%, from the first half of 2011. The growth in foreign exchange and foreign exchange products was mainly due to the lower foreign exchange loss on foreign exchange swap contracts\*. This was partly offset by the lower gain from currency exchange activities. There was a net gain from interest rate instruments and items under fair value hedge versus a net loss in the same period in 2011. The improvement was mainly attributable to the mark-to-market changes of certain interest rate

instruments of both the banking business and BOC Life, caused by market interest rate movements. The growth in equity instruments was mainly attributable to the investment gain of BOC Life's equity portfolio.

Compared to the second half of 2011, net trading gain was up HK\$459 million or 48.4%. The growth was mainly due to the lower foreign exchange loss on foreign exchange swap contracts. It was also due to the mark-to-market changes of certain interest rate instruments and foreign exchange products.

\* 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 without any 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 Gain/(Loss) 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 2012	31 December 2011	30 June 2011
Banking business of the Group*	27	(19)	18
BOC Life	159	(719)	380
Net gain/(loss) on financial instruments designated at fair value through profit or loss	186	(738)	398

<sup>\*</sup> Amounts were after group consolidation elimination.

The Group recorded a net gain of HK\$186 million on financial instruments designated at FVTPL in the first half of 2012. This gain was mainly attributable to the mark-to-market changes of certain debt securities of BOC Life, caused by market interest rate movements. The changes in market value of its securities portfolio were substantially 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 loss in the second half of 2011 was mainly attributable to the loss from the investment portfolio of BOC Life amid the weak financial market.

### **Operating Expenses**

HK\$'m	Half-year ended 30 June 2012	Half-year ended 31 December 2011	Half-year ended 30 June 2011
Staff costs  Promises and equipment expenses	3,028	3,298	2,740
Premises and equipment expenses (excluding depreciation)	681	780	610
Depreciation on owned fixed assets	722	663	614
Other operating expenses	960	1,090	864
Core operating expenses	5,391	5,831	4,828
Impact of Lehman Brothers-related products*	_	38	(2,835)
Total operating expenses	5,391	5,869	1,993

	At 30 June	At 31 December	At 30 June
	2012	2011	2011
Staff headcount measured in full-time equivalents	14,534	14,475	14,104

<sup>\*</sup> Refer to note 3 to the section of "Financial Performance and Condition in Brief" for details.

Total operating expenses increased by HK\$3,398 million, or 170.5%, to HK\$5,391 million year-on-year, as there was a net recovery of HK\$2,854 million from the underlying collateral of the Lehman Brothers Minibonds in the first half of 2011. Core operating expenses rose by HK\$563 million, or 11.7%, reflecting the Group's continued investment to support long-term business growth while maintaining disciplined cost control and operational efficiency.

Staff costs increased by 10.5%, mainly due to higher salaries as a result of annual salary increment, increase in headcount and performance-related remuneration.

Premises and equipment expenses rose by 11.6% with higher rental for branches, in particular those in the Mainland, as well as higher IT costs. Depreciation rose by 17.6%. It was largely attributable to larger depreciation charge on premises following the upward property revaluation in Hong Kong and on IT equipment as the Group continued to invest in its IT infrastructure.

Other operating expenses were up by 11.1% mainly due to higher marketing and promotion expenses as well as expenses connected with the increasing business volume.

Compared to the second half of 2011, operating expenses declined by HK\$478 million or 8.1%. The decrease was due to lower staff costs, promotion, IT and maintenance expenses in the first half of 2012.

### Net (Charge)/Reversal of Loan Impairment Allowances

HK\$'m	Half-year ended	Half-year ended	Half-year ended
	30 June 2012	31 December 2011	30 June 2011
Net (charge)/reversal of allowances before recoveries - individual assessment - collective assessment	(5)	(54)	42
	(238)	(425)	(295)
Recoveries	156	137	216
Net charge of loan impairment allowance	(87)	(342)	(37)

The Group's loan quality remained solid with a modest net charge of loan impairment allowances of HK\$87 million in the first half of 2012. There was a small net charge of HK\$5 million in individually assessed impairment allowances. The lower net charge of collectively assessed impairment allowances was primarily due to the periodic review of the parameter values in the assessment model in the first half of 2011 as well as the stronger loan growth in the first half of 2011 relative to that in the same period of 2012. Both of these factors have led to a higher net charge of collectively assessed impairment allowances in

the first half of 2011. Meanwhile, recoveries during the period totaled HK\$156 million.

Compared to the second half of 2011, net charge of loan impairment allowances decreased by HK\$255 million. The decline was mainly due to the lower net charge of collectively assessed impairment allowances as a result of the periodic review of the parameter values in the assessment model conducted in the second half of 2011 which led to a higher net charge for the corresponding period.

# BALANCE SHEET ANALYSIS Asset Deployment

	А	t 30 June 2012	At 31	December 2011
HK\$'m, except percentage amounts	Amount	% of total	Amount	% of total
Cash and balances with banks and other financial institutions Placements with banks and other	153,042	9.1%	278,795	16.0%
financial institutions maturing between one and twelve months Hong Kong SAR Government	114,548	6.8%	107,910	6.2%
certificates of indebtedness	72,160	4.3%	65,890	3.8%
Securities investments <sup>1</sup>	439,835	26.1%	425,600	24.5%
Advances and other accounts	785,932	46.6%	755,229	43.5%
Fixed assets and investment properties	57,194	3.4%	52,091	3.0%
Other assets <sup>2</sup>	62,011	3.7%	52,995	3.0%
Total assets	1,684,722	100.0%	1,738,510	100.0%

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

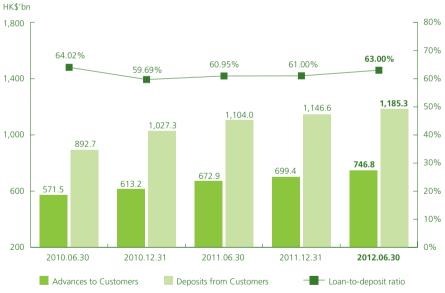
<sup>2.</sup> Interests in associates, deferred tax assets and derivative financial instruments are included in other assets.

As at 30 June 2012, the Group's total assets amounted to HK\$1,684,722 million, down HK\$53,788 million or 3.1% from the end of 2011. The decline in total assets was mainly due to the decrease in RMB funds deposited by participating banks with the clearing bank. In the first half of 2012, the Group continued to strengthen its assets and liabilities management. It maintained a balanced growth strategy on loans and deposits with focus on enhancing loan pricing and maintaining a high degree of prudence over funding costs. Higher-yielding assets such as advances to customers registered a good growth.

Key changes in the Group's total assets include:

- Cash and balances with banks and other financial institutions decreased by 45.1%, mainly due to the decline in RMB funds placed with the People's Bank of China ("PBOC") by BOCHK's clearing business as RMB funds from participating banks to the clearing bank decreased.
- Securities investments increased by 3.3% as the Group increased its holdings in RMB-denominated securities and high-quality corporate bonds.
- Advances and other accounts rose by 4.1%, which was mainly attributable to the growth in advances to customers by 6.8%.
- Other assets grew by 17.0%, which was mainly led by the increase in accounts receivable and prepayments as well as reinsurance assets.

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



#### Advances to Customers

	At 30 June 2012		At 31 [	December 2011
HK\$'m, except percentage amounts	Amount	% of total	Amount	% of total
Loans for use in Hong Kong	460,593	61.7%	444,540	63.6%
Industrial, commercial and financial	245,527	32.9%	237,557	34.0%
Individuals	215,066	28.8%	206,983	29.6%
Trade finance	67,828	9.1%	59,508	8.5%
Loans for use outside Hong Kong	218,331	29.2%	195,331	27.9%
Total advances to customers	746,752	100.0%	699,379	100.0%

In view of the volatile global economic environment, the Group adhered to stringent risk control and customer selection to achieve quality and sustainable growth. Advances to customers increased by HK\$47,373 million or 6.8% to HK\$746,752 million in the first half of 2012 with improved pricing on new corporate and residential mortgage loans.

Loans for use in Hong Kong grew moderately by HK\$16,053 million or 3.6%.

- Lending to the industrial, commercial and financial sectors increased by HK\$7,970 million, or 3.4%, to HK\$245,527 million. The increase covered a wide range of industries. Loans to the manufacturing, property investment, transport and transport equipment as well as information technology sectors grew by 11.8%, 3.4%, 5.6% and 6.6% respectively.
- Lending to individuals increased by HK\$8,083 million, or 3.9%. Residential mortgage loans (excluding those under the Government-sponsored Home Ownership Scheme) were up 4.6%. The Group has been capturing the growth opportunities arising from the revival of the local residential property market since March 2012 when the transaction volume started to increase.

Trade finance rose by HK\$8,320 million, or 14.0% while loans for use outside Hong Kong grew by HK\$23,000 million or 11.8%.

### Loan Quality

HK\$'m, except percentage amounts	At 30 June 2012	At 31 December 2011
Advances to customers	746,752	699,379
Classified or impaired loan ratio <sup>1</sup>	0.10%	0.10%
Impairment allowances	2,968	2,830
Regulatory reserve for general banking risks	7,230	6,967
Total allowances and regulatory reserve	10,198	9,797
Total allowances as a percentage of advances to customers	0.40%	0.40%
Impairment allowances <sup>2</sup> on classified or impaired loan ratio	38.58%	39.86%
Residential mortgage loans <sup>3</sup> – delinquency and rescheduled loan ratio <sup>4</sup>	0.01%	0.01%
Card advances – delinquency ratio <sup>4</sup>	0.19%	0.16%

	Half-year ended 30 June 2012	Half-year ended 30 June 2011
Card advances – charge-off ratio <sup>5</sup>	1.23%	1.07%

- 1. 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.
- 2. 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.
- 3. Residential mortgage loans exclude those under the Home Ownership Scheme and other government-sponsored home purchasing schemes.
- 4. Delinquency ratio is measured by a ratio of total amount of overdue loans (more than three months) to total outstanding loans.
- 5. 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 loan quality remained sound. The classified or impaired loan ratio remained at 0.10% – among the lowest in the industry. Classified or impaired loans increased by HK\$39 million, or 5.5%, to HK\$749 million. Formation of new classified loans in the first half of 2012 remained 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\$2,968 million. Total impairment allowances on classified or impaired loans as a percentage of total classified or impaired loans was at 38.58%.

The credit quality of the Group's residential mortgage loans continued to be sound with the combined delinquency and rescheduled loan ratio standing at 0.01% at the end of June 2012. The charge-off ratio of card advances was 1.23% in the first half of 2012, remaining below the market average.

### Deposits from Customers\*

	Į.	At 30 June 2012	At 31	December 2011
HK\$'m, except percentage amounts	Amount	% of total	Amount	% of total
Demand deposits and current accounts	73,966	6.2%	77,440	6.7%
Savings deposits	524,722	44.3%	504,868	44.0%
Time, call and notice deposits	584,169	49.3%	563,643	49.2%
	1,182,857	99.8%	1,145,951	99.9%
Structured deposits	2,424	0.2%	639	0.1%
Deposits from customers	1,185,281	100.0%	1,146,590	100.0%

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

The Group's deposit base grew by HK\$38,691 million, or 3.4%, in the first half of 2012. Savings deposits grew by 3.9% while time, call and notice deposits increased by 3.6%. Demand deposits and current accounts decreased by 4.5%. The Group's loan-to-deposit ratio was 63.00% at the end of June 2012, up 2.00 percentage points from the end of 2011.

While banks' funding pressure on HKD and USD eased in the first half of 2012, market competition for RMB deposits intensified. The Group adhered to a flexible deposit strategy to support business growth while maintaining a cautious control on funding costs.

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

HK\$'m	At 30 June 2012	At 31 December 2011
Share capital	52,864	52,864
Premises revaluation reserve	27,045	23,150
Reserve for fair value changes of available-for-sale securities	3,565	1,787
Regulatory reserve	7,230	6,967
Translation reserve	598	674
Retained earnings	49,412	44,323
Reserves	87,850	76,901
Capital and reserves attributable to the Equity Holders of the Company	140,714	129,765

Capital and reserves attributable to the equity holders increased by HK\$10,949 million, or 8.4% to HK\$140,714 million at 30 June 2012. Retained earnings rose by 11.5%, reflecting the profit for the first half of 2012 after the appropriation of final dividend of 2011. Premises revaluation reserve increased by 16.8%, which was

attributable to the increase in property prices in the first half of 2012. Regulatory reserve rose by 3.8% due to loan growth. Reserve for fair value changes of available-for-sale securities was up 99.5%, reflecting the rise in fair value of available-for-sale debt securities, mainly due to the changes in market interest rates.

### Capital and Liquidity Ratio

HK\$'m, except percentage amounts	At 30 June 2012	At 31 December 2011
Core capital after deductions Supplementary capital after deductions	89,152 30,726	84,600 29,654
Total capital base after deductions	119,878	114,254
Total risk-weighted assets	687,774	676,024
Capital adequacy ratios (consolidated basis)*		
Core capital ratio	12.96%	12.51%
Capital adequacy ratio	17.43%	16.90%

	Half-year ended 30 June 2012	Half-year ended 30 June 2011
Average liquidity ratio	39.87%	36.38%

Consolidated capital adequacy ratio at 30 June 2012 was 17.43%, 0.53 percentage point above that at the end of 2011. Total capital base expanded by 4.9% to HK\$119,878 million, mainly due to the increase in retained earnings. Total risk-weighted assets increased by 1.7% to HK\$687,774 million. The increase was mainly due to the growth of credit risk-weighted assets in light of the loan growth in the first half of 2012. Market risk-weighted assets also increased following the introduction of stressed VAR for the calculation of market risk capital charges after the Banking (Capital) (Amendment) Rules 2011 became effective on 1 January 2012. These increases were counterbalanced by the effect of no additional risk-weighted amount required for the capital floor adjustment as the Group's capital charges for the period exceeded the required capital floor amount#.

The average liquidity ratio in the first half of 2012 remained strong at 39.87%.

- \* Capital adequacy ratio is 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 bases of regulatory capital calculation for credit risk, market risk and operational risk are described in Note 3.5 to the Interim Financial Information.
- The HKMA requires that all reporting institutions using the IRB approach (whether foundation or advanced) for capital adequacy purposes are subject to a capital floor for the first three years of the adoption of the IRB approach. The use of the capital floor is to prevent a sudden fall in capital charges solely as a result of the changes in how the risk-weighted amount for credit risk is measured. The capital floor is derived by applying an adjustment factor to the capital charge calculated under the STC approach where the adjustment factors are 90%/80%/70% for the respective 1st/2nd/3rd year of the implementation of IRB approach. As at 30 June 2012 and in its second year of the implementation of FIRB approach, the Group's capital charges exceeded the capital floor amount as required by the HKMA and therefore no additional risk-weighted amount was required for the period.

### **BUSINESS REVIEW**

### **Business Segment Performance**

HK\$'m, except percentage amounts	Personal Banking	Corporate Banking	Treasury	Insurance	Others <sup>1</sup>	Consolidated
Half-year ended 30 June 2012 Profit before taxation % of total	2,763 20.0%	5,142 37.2%	4,702 34.0%	451 3.3%	767 5.5%	13,825 100.0%
Half-year ended 30 June 2011 Profit before taxation % of total	2,723 18.7%	4,453 30.5%	2,865 19.6%	291 2.0%	4,255 29.2%	14,587 100.0%

- 1. Profit before taxation of Others in the first half of 2011 included the net recovery from the underlying collateral of the Lehman Brothers Minibonds.
- 2. For additional segmental information, see Note 41 to the Interim Financial Information.

### PERSONAL BANKING

#### **Financial Results**

Personal Banking recorded a profit before taxation of HK\$2,763 million.

Net interest income increased by 11.8%, mainly driven by the growth in average loans and deposits coupled with the improvement in deposit spread. The increase was largely offset by the decrease of 10.9% in net fee and commission. Commission income from securities brokerage was lower amid adverse investment sentiments. Meanwhile, there was growth in fee income from funds distribution and credit cards. Personal loans and customer deposits increased by 4.2% and 3.2% respectively from last year end.

### **Business operation**

The Group's Personal Banking business continued to make good progress in the first half of 2012. There was satisfactory growth in both deposit and lending businesses. Funds and bonds distribution businesses also performed strongly. In addition to investing in service enhancement and branding with regard to the wealth management platform, a new private banking business platform has been set up to provide unique and tailormade services to targeted affluent customers.

### Residential mortgages - outgrowing the market

With its all-round service and expertise in residential mortgages, the Group succeeded in growing its market share and was the market leader in the underwriting of new mortgages during the period. The Group continued to work in close partnership with major property developers.

Various joint promotional activities were conducted with developers to deliver enhanced services to customers from both the Hong Kong and Mainland markets. The Group also continued to lead the market with a wide range of mortgage products and mobile applications. At the end of June 2012, the Group's mortgage book grew by 4.6% versus the end of last year.

## Investment and insurance businesses – strong growth in the sales of funds and bonds

In the first half of 2012, sentiments of the local stock market were adversely affected by the external environment. Nevertheless, the Group continued to expand its stock brokerage service spectrum to reinforce its strong position in the personal securities business. New services were introduced to enable customers to trade with a higher degree of ease.

As regards the funds distribution business, the Group rolled out new products to both high-end and mass retail customers. A private fund, the BOCHK Asian Dynamic Income Fund, and a retail fund, the BOCHK-World Bank Emerging Markets Bond Fund, were introduced to customers. During the period, the Group distributed 14 RQFII funds, making it the largest distributor of RQFII funds in Hong Kong. As a result, commission income from funds distribution surged by 31.8% year-on-year. The Group also actively engaged in the bonds distribution business. The Group's private placement services for bonds in the secondary market were launched in January this year, offering bonds to targeted high-end customers. In addition, the Group led the iBond market in terms of over-the-counter turnover. Meanwhile, the Group's

Investment Product Specialist Team was further expanded to provide customers with comprehensive professional service in connection with investment products.

Regarding its Bancassurance business, the Group strengthened its position as a prominent life insurance provider and maintained its lead in the RMB insurance market. It continued to roll out new products to meet customers' needs. The RMB-denominated "IncomeGrowth Annuity Insurance Plan" was introduced to offer life protection with guaranteed annuity payments. The Group also further enhanced its financial planning model and cross-selling capabilities with encouraging results.

# Credit card business – recording double-digit volume growth

The Group's credit card business sustained its growth momentum in the first half of 2012. It maintained its leadership in the China UnionPay merchant acquiring business and card issuing business. The Group also continued to exploit its competitive edge to extend appealing merchant offer programmes to customers through its comprehensive merchant network in Hong Kong, Macau and the Mainland. The total number of cards issued grew by 5.0% from the end of last year. Cardholder spending and merchant acquiring volumes grew by 10.8% and 16.8% respectively.

## Wealth management service – enhancing brand awareness

The Group continued to offer differentiated services and customised wealth management solutions to foster long-term relationship with wealth management customers. In the first half of 2012, the Group completed the unification of its wealth management service platform, thus strengthening its brand awareness and position in the market. In addition, a new private banking business platform has been set up to cater to the more sophisticated needs of the affluent customers. The Group also continued to work more closely with BOC branches to provide banking services to high net-worth customers from the Mainland.

# Distribution channels – e-channels with enhanced security features

The Group kept optimising its distribution channels to meet the needs of both local and cross-border customers.

At the end of June 2012, the Group's service network in Hong Kong comprised 267 branches, including 137 wealth management centres.

The Group further invested in automated banking channels. In April, it launched Hong Kong's first chip-based ATM card with enhanced security and new banking service functions. With the new chip-based BOC Card, customers can enjoy the BOC Card services in Hong Kong, the Mainland and overseas, including the settlement of purchases and HKD/RMB notes withdrawal at "JETCO" ATMs in Hong Kong. Fund transfer and bill payment can also be made through the ATM and point-of-sale networks. The functions of the Group's e-Banking platform were expanded, including the use of a new security device for two-factor authentication. At the same time, the Group also introduced more mobile banking services.

In recognition of their outstanding salesmanship, four of the Group's sales personnel were honoured with the "Distinguished Salesperson" awards 2012 organised by the Hong Kong Management Association.

### CORPORATE BANKING

### **Financial Results**

Corporate Banking recorded a satisfactory growth of HK\$689 million, or 15.5%, in profit before taxation. This was mainly attributable to the increase in net interest income as well as net fee and commission income.

Net interest income rose by 13.2%, mainly driven by an expansion in loans. The growth in net interest income was also attributable to the increase in deposits with improvement in the average deposit spread. Corporate loans and customer deposits grew by 7.9% and 3.6% respectively from the end of 2011.

Net fee and commission income increased by 21.0%, largely led by the growth in loan commissions. Meanwhile, bills commissions declined along with the slowdown of economic activities.

### **Business operation**

Despite a slowdown of the economy, the Group's Corporate Banking business recorded satisfactory loan growth with better loan pricing in the first six months of

2012. It remained the top mandated arranger in the Hong Kong syndicated loan market and continued to provide strong support to its corporate customers. In view of the fast expansion of the offshore RMB business, more innovative trade-related products were introduced to corporate clients. The Group also made good progress in the custody and cash management businesses. As regards the custody business, the Group was the largest service provider for RQFII funds in the market. Cross-border cash management capabilities were further enhanced with the linkage of the Group's e-Banking platform with those of BOC and its overseas branches.

## Corporate lending business – 7.9% growth of corporate loans

The Group continued to implement "Total Solution" for core customers and enhanced the management of its clientele in different industries through better customer segmentation. Tailor-made services were provided to large corporates and public sector entities with the aim to become their main banker. At the end of June, the Group's balance of corporate loans grew by 7.9% from the end of 2011. In the first half of 2012, the Group successfully arranged the first 100% RMB syndicated loan in Hong Kong and it was also the largest of its kind in the market by the end of June 2012. The Group remained the top mandated arranger in the Hong Kong syndicated loan market in the first half of 2012.

## SME business – providing full-fledged services to customers

The Group stepped up its service capabilities for SME customers. It optimised the business model of "Integrated Branches for Commercial Business" by establishing exclusive counters in selected branches and launched the "Business Integrated Account" to provide one-stop financial solutions, including consultation services on credit facilities, cash management and insurance, as well as personal financial solutions for SME companies and their proprietors, partners or shareholders. The Group also actively participated in the "SME Financing Guarantee Scheme" launched by the Hong Kong Mortgage Corporation Limited. In recognition of its long-standing support for SMEs in Hong Kong, the Group received for the fifth consecutive year the "SME's Best Partner Award" presented by the Hong Kong Chamber of Small and Medium Business Limited.

# Trade finance – product innovation and promotion to drive growth

Taking advantage of its strong cross-border service capabilities and the continuous expansion of the offshore RMB business, the Group was able to capture more business opportunities in trade finance. In collaboration with BOC and NCB (China), it actively promoted the factoring business. Through product innovation, especially in RMB financing and RMB settlement, the Group further enhanced its competitiveness in the trade finance business. A new product, "Acceptance L/C Discounting" was launched during the period. At the end of June 2012, the Group's balance of trade finance grew by 14.0% from the end of 2011.

## Custody service – becoming the largest service provider for RQFII fund products

The custody business continued to expand in the first half of 2012. The Group successfully secured mandates for a number of RMB fund products during the period, and became the largest service provider for RQFII funds in the market. At the same time, the Group continued to provide high-quality global custody services to Qualified Domestic Institutional Investors and various types of fund clients. During the period, the Group completed several deals in providing escrow services to large corporate entities and financial institutions. At the end of June 2012, excluding the RMB fiduciary account for participating banks, total assets under the Group's custody were valued at HK\$536 billion.

## Cash management service – making solid progress in cross-border servicing capabilities

In line with the extension of the operating hours of the RMB Real Time Gross Settlement ("RMB RTGS") system in Hong Kong, the Group extended the service hours for same-day RMB telegraphic transfer and express transfer instructions made through internet banking. The intra-day cash pooling service was launched to enable corporate customers to build up a cash pool, allowing better internal cash flow management. The linkage of the Group's e-Banking platform with those of BOC and its overseas branches has been completed, enabling the Group's corporate customers to operate their overseas BOC accounts via Corporate Internet Banking and BOC customers to operate their BOCHK accounts via BOC Online Banking ("BOCNET"). This has greatly enhanced the cross-border cash management capabilities of the Group.

### Risk management - proactive measures in place

The Group remained highly focused on safeguarding its asset quality by adhering strictly to its risk management policy. It performed close credit monitoring on corporate customers who could be adversely affected by the volatile economic environment, including the slowdown of the Mainland's export growth which may pose an adverse impact on the investments of manufacturing establishments. The Group also stays alert to the latest development of the Eurozone debt crisis and the impact of the Central Government's stimulation measures on the Chinese economy.

### **MAINLAND BUSINESS**

### Financial performance - maintaining healthy growth

The Group's Mainland business maintained healthy growth in the first half of 2012. It strengthened its deposit base by growing customer deposits by 9.8% from the end of last year. During the period, it focused on optimising the loan structure and improving loan pricing. Advances to customers grew by 1.2% with the overall loan quality remaining sound. Total operating income increased by 32.7% year-on-year, mainly driven by the strong growth in net interest income.

## Distribution channels – building up branch network and channel sharing with BOC

In view of the slower economic growth and lower domestic demand in the Mainland, the Group proactively adjusted its product and business strategy. It stepped up its marketing effort and deepened its business collaboration with the BOC group. The "Channel Sharing" model, which allows promotional activities to be conducted on-site and via e-channels with BOC's branches, has been effective in serving its purpose. During the interim period, the model not only boosted deposit growth but also generated more retail banking business. Meanwhile, the upgrade of the Group's e-Banking platforms in 2011 proved to be extremely successful as the number of new accounts and transaction volume increased significantly. The range of wealth management products was further expanded, resulting in a complete series of "Yi Da" products. All wealth management products could be acquired via the e-Banking platform. The Group has been actively preparing for the issuance of credit cards in the Mainland. The SME business platform was instrumental to the completion of the "SME Business Win" product series, leading to a satisfactory growth in SME lending in the interim period. During the first half of 2012, four new NCB (China) sub-branches, including the Shanghai Huangpu Sub-branch, Guangdong Foshan Sub-branch, Chengdu Chuangye Road Sub-branch and Dongguan Sub-branch, commenced operation. The Group's total number of branches and sub-branches in the Mainland increased to 31 by the end of June 2012.

### **TREASURY**

#### **Financial Results**

Treasury recorded a strong year-on-year increase of 64.1% in profit before taxation.

Net interest income grew by 71.2% with the improved yield on interbank placements coupled with the increase in the related balance.

Net trading gain was up 111.4%. The growth was caused by the lower foreign exchange loss on foreign exchange swap contracts and the increase in mark-to-market gain of certain interest rate instruments.

### **Business Operation**

## Proactive investment strategy – maintaining a balance on safety, liquidity and yield enhancement

The Group continued with a proactive but prudent approach in managing its banking book investments. In the first half of the year, the Group closely monitored market changes and acted swiftly to adjust its investment portfolio in response to the deterioration of the European debt crisis. During the period, the Group increased its holdings in RMB-denominated securities and high-quality corporate bonds.

### Product innovation – responding to customers' needs

In line with its customer-centric approach, the Group continued with product innovation to meet customers' needs. In the first half of 2012, the RMB exchange business was adversely affected by the slower economic growth of the Mainland and the lower expectation for the appreciation of the RMB. The Group responded quickly to these market changes by rolling out new product packages that bundled offshore RMB exchange rate-related and interest rate-related products with deposits, loans and trade finance, thus lowering customers' exchange rate risk and financing costs.

As part of its ongoing endeavour to facilitate the development of the offshore RMB bond market, the Group launched three new offshore RMB bond sub-indices. These were the BOCHK Offshore RMB Chinese Sovereign Bond Index, the BOCHK Offshore RMB Investment Grade Bond Index and the BOCHK Offshore RMB 1 to 3 Years Central Government Bond Index, which serve as performance benchmarks for the offshore RMB bond market. Meanwhile, the Group remained an active participant in the offshore RMB bond underwriting business.

## RMB-clearing bank service – extending service hours to offshore markets

The Group maintained strong support for its clearing services. The operating hours of the RMB RTGS were extended to cover the working hours in other major financial centres, including London and New York. This not only facilitated participating banks and their customers in conducting RMB cross-border settlement and payment, but also enhanced BOCHK's brand awareness at the global level.

### Banknotes business - building up a global network

The Group continued to cooperate with BOC's overseas branches in extending the overseas RMB banknotes business. The transaction turnover rose significantly from the same period in 2011. Meanwhile, the Group has established business relationships with banks and financial institutions in different countries and regions, and has also penetrated the non-RMB banknotes business in these markets.

### **INSURANCE**

### **Financial Results**

The Group's Insurance segment recorded a strong growth in its profit before taxation by 55.0% to HK\$451 million in the first half of 2012. The growth was mainly attributable to the better investment performance comparing to the same period last year.

The increase in realised gain from equity investments as well as mark-to-market gain of debt securities contributed to the improvement of investment income.

### **Business Operation**

### Driving growth through service enhancement

Through the constant optimisation of product features and service enhancement, the Group continued to improve its

services for customers. A series of training programmes were conducted to enhance the professionalism and capabilities of the sales team. To reinforce its brand and promote its product offerings, BOC Life also launched major promotion campaigns. The sale of investment-linked products also registered a satisfactory growth.

### RMB insurance products - a prominent provider

The Group maintained its leading position in the RMB insurance market. Popular RMB insurance products such as the "Target 5 Years Insurance Plan Series", "Multi-Plus Savings Insurance Plan" and "RMB Universal Life Insurance Plan" continued to be well received by customers. To meet customers' needs, the Group launched the RMB-denominated "IncomeGrowth Annuity Insurance Plan", a RMB income insurance plan providing life protection with guaranteed annuity payments. During the first half of 2012, BOC Life was granted the approval to invest directly in the Mainland's interbank bond market, thus facilitating the expansion of RMB assets and the further development of its RMB insurance products.

### **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 growth and 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 order to achieve its business goals and to meet the expectations of its stakeholders under a controllable risk level.

### **Risk Management Governance Structure**

The Group's risk management governance structure is designed to cover all business processes and ensure 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 modified 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, reviewing and approving high-level risk-related policies and overseeing 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 dayto-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. He may 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 that a customer or counterparty 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, internal rating criteria, internal rating platforms and the risk-weighted asset calculation for credit risk. For loans and advances to customers, 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 credit experts 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. Corporate and financial institution credit applications are independently reviewed and objectively assessed by risk management units. Obligor ratings and facility

grades are assigned to these portfolios. 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 ratings as well as loss estimates (if applicable) are used to support credit approval.

The Group identifies credit concentration risk by industry, geography, customer and counterparty risk. The Group monitors changes to counterparties credit risk, the quality of the credit portfolio and risk concentrations, and reports regularly to the Group's management.

The Group uses loan grades, obligor ratings and loss estimates (if applicable) to support credit monitoring, analysis and reporting. For corporate and financial institution, more frequent rating review and closer monitoring are required for higher-risk customers. For retail exposures, monthly updated ratings and loss estimates are used for credit monitoring on a portfolio basis. More comprehensive review is required for obligors being identified under high-risk pools. The Group has established credit risk master scale for internal rating purpose, which is in compliance with the Banking (Capital) Rules under the Hong Kong Banking Ordinance on rating structure, and can be mapped to Standard & Poor's external ratings. In addition to obligor ratings, the Group adopts a facility rating system (in the case of corporate and bank exposure) and expected loss (in the case of retail exposure) to assess the risk in the facility structure during credit approval. This two-dimensional rating approach to evaluate credit risk complies with the HKMA's requirements on IRB.

In the first half of 2012, the Group has continued 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.

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 loans and 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.

### **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 so 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 cashflows 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 Interest Rate Risk Management Policy" approved by RC. The Market Risk Management Division of the RMD is the unit responsible for interest rate risk management. With the cooperation of the Financial Management Department (Asset & Liability Management) and Investment Management, the 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 RC and senior management, 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, re-pricing 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 (NII) and economic value sensitivity ratio (EV) 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 as well as capital base arising from the optionality of demand and savings deposits, the prepayment of mortgage loans and the prepayment of debt securities with embedded options.

### **Market Risk Management**

Market risk refers to the risk of losses arising from adverse movements in the value of foreign exchange and commodity positions and the trading book 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 robust market risk appetite to achieve 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 the treasury business on the basis of a well-established risk management regime and related 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, ensuring that the aggregate and individual market risks are within acceptable level.

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 work; 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 subsidiaries may, subject to prior consent by BOCHK, formulate the detailed policies and

procedures and must bear the responsibility for managing daily market risk that they may face. 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 approved by the RC, MC, CRO and the DCE in charge of the treasury business or the head of the respective business unit. Treasury business units of BOCHK and other subsidiaries (as for Group Limit) are required to conduct their business within approved market risk indicators and limits.

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

The predictive power of the VAR measure is monitored by back-testing, which compares the calculated VAR figure of trading 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 on a monthly basis.

### **Liquidity Risk Management**

Liquidity risk is the risk that banks fail to provide sufficient funds to grow assets or pay due obligations, and so need to bear an unacceptable loss. The Group follows a 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 that a stable and sufficient source of funds is in place, the Group actively attracts new deposits, keeps the core deposits 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, bond investments, interbank placements, etc.) to maintain sufficient liquid assets in support of normal business needs and ensure its ability to raise enough funds at reasonable costs to serve external claims in case of emergency. The Group is committed to diversifying the source of funds and the use of funds to avoid excessive concentration of assets and liabilities, and to prevent triggering liquidity risk due to the break of funding strand when problems occur in one concentrated funding source. The Group also pays attention to 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, intraday liquidity, intra-group liquidity, the liquidity risk arising from others' risk, etc., and has formulated a corresponding funding 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 the RC, the 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 the RC. The Market Risk Management Division of the RMD is the unit responsible for overseeing the Group's liquidity risk. It cooperates with the Financial Management Department (Assets and Liabilities Management), Investment Management, etc. to assist the ALCO in performing liquidity management functions according to their specific responsibilities.

The Group has established liquidity risk management indicators and limits to identify, measure, monitor and control liquidity risk. Such indicators and limits include (but are not limited to) the liquidity ratio, deposit stability

ratio, loan-to-deposit ratio, Maximum Cumulative Outflow ("MCO") and liquidity buffer asset portfolio. The Group applies cash flow analysis (under normal and stress conditions) and liquidity stress test (including institution-specific and worldwide crisis) to assess the Group's capability to withstand various severe liquidity crises. Also, the Assets and Liabilities Management System is developed to provide data support for facilitating the liquidity risk management duties.

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 the 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 formulates 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 the Market Risk Management Division of the RMD 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, self checking, self correction and self development. 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, which is 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 robustness 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 erosion. 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 company, 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 framework, including system support, to achieve continuous monitoring of external reputation risk incidents and published failures of risk incidents in the financial industry.

### 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 a bank 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.

### Strategic Risk Management

Strategic risk generally refers to the risks that may induce immediate or future negative impact on the financial and market positions of the Group because of poor strategic decisions, improper implementation of strategies and lack of response to the market. The Board reviews and approves the policy for the management of strategic risks. Key strategic issues have to be fully evaluated and properly endorsed by the senior management and the Board.

The Group will regularly review 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 adjusts the capital mix where appropriate 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. Using the statutory minimum capital adequacy ratio ("CAR"), 8%, as a starting point, extra capital (capital add-on) needed to cover the material risks not captured under Pillar I is assessed. A Scorecard approach based on the HKMA's compliance guidance on Pillar II has been used to evaluate the Group's risk profile in order to assess the add-on capital to determine the minimum common equity CAR, minimum core CAR and the minimum CAR. In the process, an Operating CAR Range has also been established which incorporates the need for future business growth and efficiency of capital utilisation.

The HKMA has issued a consultation paper on capital standards in January 2012 for the implementation of Basel III in Hong Kong. The Group has conducted a detailed impact analysis of it and has prepared for the future implementation of new capital requirements.

### **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 and 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 Board and RC regularly.

### **BOC Life Insurance**

BOC Life's principal business activity is the underwriting of long-term insurance business in life and annuity, unit-linked long-term business and retirement scheme management 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 arrangement.

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 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 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 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 premiums generate constant cash inflows and, as a result, the portfolios also grow gradually to meet future liquidity requirement.

### **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. For the management of reinsurers' credit risk, please refer to the Insurance Risk Management above.