

# MANAGEMENT'S DISCUSSION AND ANALYSIS

The following sections provide metrics and analytics of the Group's performance, financial position, and risk management. These should be read in conjunction with the interim financial information included in this Interim Report.

## FINANCIAL PERFORMANCE AND CONDITION IN BRIEF

The following table is a summary of the Group's key financial results for the first half of 2009 with a comparison with the previous two half-yearly periods.

Financial Indicators		2009 First Half Performance								
<b>1. Profit Attributable to Shareholders</b>	<p>HK\$m</p> <table border="1"> <tr> <th>Period</th> <th>Profit Attributable to Shareholders (HK\$m)</th> </tr> <tr> <td>1H2008</td> <td>7,088</td> </tr> <tr> <td>2H2008</td> <td>(3,745)</td> </tr> <tr> <td>1H2009</td> <td>6,691</td> </tr> </table>	Period	Profit Attributable to Shareholders (HK\$m)	1H2008	7,088	2H2008	(3,745)	1H2009	6,691	<p><b>Profit attributable to shareholders</b></p> <ul style="list-style-type: none"> <li>Profit attributable to shareholders was HK\$6,691 million, down HK\$397 million, or 5.6%, year-on-year</li> </ul>
Period	Profit Attributable to Shareholders (HK\$m)									
1H2008	7,088									
2H2008	(3,745)									
1H2009	6,691									
<b>2. Return on Average Shareholders' Funds ("ROE") (Annualised)</b>	<p>%</p> <table border="1"> <tr> <th>Period</th> <th>ROE (%)</th> </tr> <tr> <td>1H2008</td> <td>15.09</td> </tr> <tr> <td>2H2008</td> <td>(8.43)</td> </tr> <tr> <td>1H2009</td> <td>15.13</td> </tr> </table>	Period	ROE (%)	1H2008	15.09	2H2008	(8.43)	1H2009	15.13	<p><b>ROE</b></p> <ul style="list-style-type: none"> <li>ROE was 15.13%, up 0.04 percentage point year-on-year</li> </ul>
Period	ROE (%)									
1H2008	15.09									
2H2008	(8.43)									
1H2009	15.13									
<b>3. Return on Average Total Assets ("ROA") (Annualised)</b>	<p>%</p> <table border="1"> <tr> <th>Period</th> <th>ROA (%)</th> </tr> <tr> <td>1H2008</td> <td>1.32</td> </tr> <tr> <td>2H2008</td> <td>(0.75)</td> </tr> <tr> <td>1H2009</td> <td>1.23</td> </tr> </table>	Period	ROA (%)	1H2008	1.32	2H2008	(0.75)	1H2009	1.23	<p><b>ROA</b></p> <ul style="list-style-type: none"> <li>ROA was 1.23%, down 0.09 percentage point year-on-year</li> </ul>
Period	ROA (%)									
1H2008	1.32									
2H2008	(0.75)									
1H2009	1.23									
<b>4. Net Interest Margin ("NIM")</b>	<p>%</p> <table border="1"> <tr> <th>Period</th> <th>NIM (%)</th> </tr> <tr> <td>1H2008</td> <td>2.03</td> </tr> <tr> <td>2H2008</td> <td>1.97</td> </tr> <tr> <td>1H2009</td> <td>1.76</td> </tr> </table>	Period	NIM (%)	1H2008	2.03	2H2008	1.97	1H2009	1.76	<p><b>NIM</b></p> <ul style="list-style-type: none"> <li>NIM was 1.76%, down 27 basis points year-on-year, due to lower market interest rates and the higher funding cost of subordinated loans</li> <li>NIM was down 21 basis points from the second half of 2008</li> </ul>
Period	NIM (%)									
1H2008	2.03									
2H2008	1.97									
1H2009	1.76									

Financial Indicators		2009 First Half Performance	
<b>5. Cost-to-Income Ratio ("CIR")</b>	<p>Bar chart showing Cost-to-Income Ratio (%) for 1H2008 (29.12), 2H2008 (40.77), and 1H2009 (32.19).</p>	<b>CIR</b> <ul style="list-style-type: none"> <li>CIR was up 3.07 percentage points year-on-year as operating expenses increased by 2.6% while operating income decreased by 7.2%</li> <li>CIR fell by 8.58 percentage points from the second half of 2008 as operating expenses decreased by 10.4% whereas operating income grew by 13.4%</li> </ul>	
<b>6. Advances to Customers</b>	<p>Bar chart showing Advances to Customers (HK\$'bn) for 2008.06.30 (475.6), 2008.12.31 (460.4), and 2009.06.30 (475.6).</p>	<b>Advances to Customers</b> <ul style="list-style-type: none"> <li>Although loan demand in general was weak and declining, the Group outperformed the market with its advances to customers growing by 3.3% from end-2008 to HK\$475.6 billion</li> </ul>	
<b>7. Classified or Impaired Loan Ratio</b>	<p>Bar chart showing Classified or Impaired Loan Ratio (%) for 2008.06.30 (0.34), 2008.12.31 (0.46), and 2009.06.30 (0.37).</p>	<b>Classified or Impaired Loan Ratio</b> <ul style="list-style-type: none"> <li>Classified or impaired loan ratio fell to 0.37%, from 0.46% at end-2008</li> <li>Formation of new classified loans remained at a low level, representing approximately 0.1% of total loans</li> </ul>	
<b>8. Deposits from Customers (including structured deposits)</b>	<p>Bar chart showing Deposits from Customers (HK\$'bn) for 2008.06.30 (822.7), 2008.12.31 (811.5), and 2009.06.30 (824.7).</p>	<b>Deposits from Customers</b> <ul style="list-style-type: none"> <li>Total deposits increased by 1.6% from end-2008 to HK\$824.7 billion, with an improved deposit mix</li> </ul>	
<b>9. Capital Adequacy Ratio ("CAR")</b>	<p>Bar chart showing Capital Adequacy Ratio (%) for 2008.06.30 (13.87), 2008.12.31 (16.17), and 2009.06.30 (16.10).</p>	<b>CAR</b> <ul style="list-style-type: none"> <li>CAR maintained at a high level of 16.10% at the end of June 2009</li> <li>Tier-1 ratio stood at 11.24%</li> </ul>	
<b>10. Average Liquidity Ratio</b>	<p>Bar chart showing Average Liquidity Ratio (%) for 1H2008 (42.47), 2H2008 (41.01), and 1H2009 (39.70).</p>	<b>Average Liquidity Ratio</b> <ul style="list-style-type: none"> <li>Average liquidity ratio remained healthy at 39.70% in the first half of 2009</li> </ul>	

### ECONOMIC BACKGROUND & OPERATING ENVIRONMENT

The operating environment as a whole remained very challenging in the first half of 2009. In the wake of the global financial crisis, the world economy was undergoing a downturn. The US recorded an annualised contraction of 6.4% in its GDP in the first quarter of 2009. Economies in the Euro region and Japan were down by 9.7% and 14.2% respectively in the same period. The effect of the drastic measures and low interest rate policy taken by respective governments was still to be seen. Hong Kong also recorded a GDP decline of 7.8% during the same period largely due to sluggish external trade, private consumption and investment. The economic contraction it experienced was the severest since the 1997 Asian Financial Crisis. The labour market was made to suffer with the unemployment rate climbing to 5.4% at the end of June, the highest since November 2005, which affected virtually all sectors of the economy. Inflationary pressure subsided with the composite consumer price index in June falling by 0.5% compared with end-2008.

The local banking sector was not exempted from the impact of economic recession. The slowdown in economic activities eroded banks' interest income from lending and

fee income from wealth management. The profitability of banks was affected by lower market demand for loans and other banking services while low interest rates led to narrower net interest margin. In particular the selling of investment products virtually came to a halt after the occurrence of the Lehman Brothers Minibonds incident.

However, in the second quarter, there were signs that the rate of economic decline in the US and Europe was moderating. Back home, economic activities in the Mainland boosted by the PRC Government's policy stimulus had a positive impact on the Hong Kong economy. At the same time, Hong Kong benefited from an influx of capital, which led to a strong rebound in both the stock and residential property markets but yet the competition for mortgage business intensified.

In July, the People's Bank of China and other regulatory authorities in the Mainland launched the "Pilot Programme of Renminbi Settlement of Cross-Border Trade Transactions". It grants the right of issuing RMB bonds in Hong Kong by foreign banking subsidiaries in the Mainland. This paves the way for the further development of Hong Kong as an offshore RMB centre.

## CONSOLIDATED FINANCIAL REVIEW

In the first half of 2009, the adverse impact of the global financial crisis was still keenly felt. Against this background, the Group continued to solidify its financial strength to maintain a healthy capital base, and to fortify risk management. At the same time, it focused on growing its income from traditional banking businesses and exercised prudent cost control. In the first six months of 2009, the Group's operating profit before impairment allowances decreased by HK\$1,117 million, or 11.2%, year-on-year to HK\$8,834 million, mainly because of the decline in net interest income and net trading income of the banking operation. However, the Group recorded growth in net fees and commission income as well as operating income from its insurance segment. During the period, a lower impairment charge

on securities investments and a net reversal of loan impairment allowances were also recorded. The Group's profit attributable to shareholders decreased by HK\$397 million, or 5.6%, to HK\$6,691 million. Earnings per share were HK\$0.6329, down HK\$0.0375. Return on average total assets ("ROA") and return on average shareholders' funds ("ROE") were 1.23% and 15.13% respectively.

Compared to the second half of 2008, the Group's operating profit before impairment allowances increased by HK\$2,030 million or 29.8%. Lower net interest income was more than offset by the increase in net fees and commission income, net trading income of the banking operation, operating income registered by the Group's insurance segment as well as lower operating expenses.

### Financial Highlights

	<b>Half-year ended 30 June 2009</b>	Half-year ended 31 December 2008	Half-year ended 30 June 2008
HK\$m, except percentage amounts			
Operating income	<b>13,028</b>	11,487	14,039
Operating expenses	<b>(4,194)</b>	(4,683)	(4,088)
Operating profit before impairment allowances	<b>8,834</b>	6,804	9,951
Net charge of impairment allowances	<b>(1,115)</b>	(10,346)	(2,227)
Others	<b>525</b>	(814)	710
Profit/(loss) before taxation	<b>8,244</b>	(4,356)	8,434
Profit/(loss) attributable to equity holders of the Company	<b>6,691</b>	(3,745)	7,088
Earnings per share (HK\$)	<b>0.6329</b>	(0.3542)	0.6704
Return on average total assets	<b>1.23%</b>	(0.75%)	1.32%
Return on average shareholders' funds*	<b>15.13%</b>	(8.43%)	15.09%
Return on average total assets before impairment allowances	<b>1.58%</b>	1.23%	1.83%
Return on average shareholders' funds before impairment allowances*	<b>19.98%</b>	15.31%	21.18%
Net interest margin (NIM)	<b>1.76%</b>	1.97%	2.03%
Non-interest income ratio	<b>31.46%</b>	11.83%	28.56%
Cost-to-income ratio	<b>32.19%</b>	40.77%	29.12%

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

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	<b>Half-year ended 30 June 2009</b>	Half-year ended 31 December 2008	Half-year ended 30 June 2008
Interest income	<b>11,993</b>	17,176	18,105
Interest expense	<b>(3,064)</b>	(7,048)	(8,076)
Net interest income	<b>8,929</b>	10,128	10,029
Average interest-earning assets	<b>1,023,452</b>	1,024,038	988,746
Net interest spread	<b>1.69%</b>	1.77%	1.79%
Net interest margin	<b>1.76%</b>	1.97%	2.03%

In the first half of 2009, short term market interest rates stayed at a low level. Compared to the first half of 2008, average one-month HIBOR fell by 177 basis points to 0.21% while average one-month LIBOR declined by 253 basis points to 0.42%. The Group's average HKD Prime rate decreased by 62 basis points year-on-year to 5.00%, thus widening the HKD Prime-to-one-month HIBOR spread (hereafter called "Prime-HIBOR spread") by 115 basis points to 4.79%.

The Group's net interest income decreased by HK\$1,100 million, or 11.0%, year-on-year to HK\$8,929 million. The decline was mainly due to the drop in net interest margin, partially offset by the growth in average interest-earning assets which grew by HK\$34,706 million, or 3.5%, compared to the first half of 2008.

Net interest margin fell by 27 basis points to 1.76%. The decline was primarily caused by the decline in contribution from net free funds under the low interest rate environment together with lower net interest spread.

Compared to the first half of 2008, the average yield of interest-earning assets fell by 145 basis points while the average rate of interest-bearing liabilities dropped by 135 basis points. The contribution of net free funds to the net interest margin fell by 17 basis points to 7 basis points.

The narrowing of net interest spread was largely due to the higher funding cost of the subordinated loans\*. During the period, the Group managed its funding cost scrupulously. Deposit mix improved with an increase in the proportion of average demand deposits and current accounts as well as savings deposits in the Group's average total deposits. The net interest spread declined by 10 basis points to 1.69%.

\* Bank of China (Hong Kong) Limited, the principal operating subsidiary with the Group secured two subordinated loans from BOC, in June and December 2008 respectively

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

	Half-year ended 30 June 2009		Half-year ended 31 December 2008		Half-year ended 30 June 2008	
	Average balance HK\$'m	Average yield %	Average balance HK\$'m	Average yield %	Average balance HK\$'m	Average yield %
<b>ASSETS</b>						
Cash, balances and placements with banks and other financial institutions	235,320	1.49	309,519	1.82	213,538	2.53
Debt securities investments	325,425	2.54	301,124	4.05	312,522	4.49
Loans and advances to customers	451,590	2.38	401,366	4.00	447,133	3.68
Other interest-earning assets	11,117	1.53	12,029	3.05	15,553	2.82
Total interest-earning assets	1,023,452	2.22	1,024,038	3.35	988,746	3.67
Non interest-earning assets	96,879		83,992		101,572	
Total assets	1,120,331	2.02	1,108,030	3.09	1,090,318	3.33

	Half-year ended 30 June 2009		Half-year ended 31 December 2008		Half-year ended 30 June 2008	
	Average balance HK\$'m	Average rate %	Average balance HK\$'m	Average rate %	Average balance HK\$'m	Average rate %
<b>LIABILITIES</b>						
Deposits and balances of banks and other financial institutions	100,535	1.62	89,327	1.80	70,561	2.04
Current, savings and fixed deposits	763,486	0.39	775,768	1.46	758,195	1.85
Certificates of deposit issued	846	3.94	1,046	5.39	1,905	2.81
Other interest-bearing liabilities	20,779	0.29	25,096	4.11	30,112	2.23
Total interest-bearing liabilities	885,646	0.53	891,237	1.58	860,773	1.88
Non interest-bearing deposits	42,278		32,588		41,542	
Shareholders' funds* and non interest-bearing liabilities	192,407		184,205		188,003	
Total liabilities	1,120,331	0.42	1,108,030	1.27	1,090,318	1.49

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

Compared to the second half of 2008, net interest income fell by HK\$1,199 million, or 11.8%. Average interest-earning assets decreased slightly by HK\$586 million, or 0.1%. Net interest margin fell by 21 basis points with the decline in net interest spread and contribution from net free funds by 8 basis points and 13 basis points respectively.

Average one-month LIBOR fell by 201 basis points to 0.42% while average one-month HIBOR decreased by 181 basis points to 0.21% when compared to the second half of 2008. The Group's average HKD Prime rate decreased by 18 basis points, thus widening the Prime-HIBOR spread by 163 basis points. The decrease in net interest income was mainly attributable to the decline in contribution of net free funds along with the fall in market interest rates and lower net interest spread. The decrease in net interest spread was primarily caused by the higher funding cost of the aforementioned subordinated loans.

**Net Fees and Commission Income**

HK\$'m	<b>Half-year ended 30 June 2009</b>	Half-year ended 31 December 2008	Half-year ended 30 June 2008
Investment and insurance fee income	<b>1,741</b>	1,221	1,743
Securities brokerage (Stockbroking)	<b>1,625</b>	1,091	1,289
Securities brokerage (Bonds)	<b>4</b>	39	220
Funds distribution	<b>38</b>	61	157
Life insurance*	<b>74</b>	30	77
Credit cards	<b>705</b>	754	663
Loan commissions	<b>398</b>	250	263
Bills commissions	<b>310</b>	354	329
Payment services	<b>227</b>	247	239
Account services	<b>132</b>	115	146
Currency exchange	<b>87</b>	96	108
Trust services	<b>82</b>	86	87
General insurance	<b>48</b>	47	55
Correspondent banking	<b>21</b>	23	21
Custody	<b>15</b>	16	29
IPO-related business	<b>1</b>	0	30
Others	<b>117</b>	160	132
Fees and commission income	<b>3,884</b>	3,369	3,845
Fees and commission expenses	<b>(937)</b>	(1,089)	(946)
Net fees and commission income	<b>2,947</b>	2,280	2,899

\* Fee income from life insurance only included that from the Group's insurance business partner after group consolidation elimination.

Net fees and commission income grew by HK\$48 million, or 1.7% year-on-year, to HK\$2,947 million, mainly driven by the strong growth of HK\$135 million or 51.3% in loan commissions as a result of the expansion of the Group's loan portfolio and the increase in commission income from syndicated loans. The Group's appointment as the BOC Group's "Asia-Pacific Syndicated Loan Centre" ("the Syndicated Loan Centre") not only enhances its collaboration with other members of the BOC Group but also allows it to expand its service foothold in the Region. Commission income from syndicated loans generated through the Syndicated Loan Centre increased year-on-year. Investment and insurance fee income, which is discussed in the next section "Investment and Insurance Business", dropped marginally by HK\$2 million or 0.1%. Fees from the credit card business grew by HK\$42 million, or 6.3%, as cardholder spending and merchant acquiring volume were up 1.4% and 5.8% respectively. Fee income

from the Group's other traditional banking businesses such as bills commissions, payment services and currency exchange recorded a decline due to lower business volumes in the economic downturn. Fee income from IPO-related business decreased with the sharp decline in IPO activities in the market. Meanwhile, fees and commission expenses decreased by HK\$9 million or 1.0%.

Compared to the second half of 2008, net fees and commission income rose by HK\$667 million or 29.3%, largely because of the \$520 million or 42.6% increase in investment and insurance fee income. Meanwhile, fees and commission income from the loan business rose by 59.2%. With the economic slowdown moderating in the second quarter of 2009, the transaction volumes and related fee incomes of other traditional banking businesses recorded a broad-based increase when compared to the first quarter of 2009.

**Investment and Insurance Business**

HK\$'m	<b>Half-year ended 30 June 2009</b>	Half-year ended 31 December 2008	Half-year ended 30 June 2008
Investment and insurance fee income			
Securities brokerage (Stockbroking)	<b>1,625</b>	1,091	1,289
Securities brokerage (Bonds)	<b>4</b>	39	220
Funds distribution	<b>38</b>	61	157
Life insurance*	<b>74</b>	30	77
	<b>1,741</b>	1,221	1,743
Insurance and investment income of BOC Life			
Net insurance premium income	<b>2,261</b>	1,390	4,501
Interest income	<b>562</b>	584	538
Net (loss)/gain on financial instruments designated at fair value through profit or loss	<b>(1,575)</b>	1,256	(1,392)
Others	<b>5</b>	9	8
	<b>1,253</b>	3,239	3,655
Less: net insurance benefits and claims	<b>(919)</b>	(4,107)	(3,602)
	<b>334</b>	(868)	53
Total investment and insurance income	<b>2,075</b>	353	1,796
Of which: Life insurance fee income*	<b>74</b>	30	77
Insurance income/(loss) of BOC Life#	<b>334</b>	(868)	53
	<b>408</b>	(838)	130
Total life insurance income/(loss)	<b>408</b>	(838)	130
Investment fee income	<b>1,667</b>	1,191	1,666
Total investment and insurance income	<b>2,075</b>	353	1,796

\* Fee income from life insurance only included that from the Group's insurance business partner after group consolidation elimination.

# Before commission expenses.

The Group's investment and insurance income registered an increase of HK\$279 million or 15.5% to HK\$2,075 million when compared to the same period last year. In the wake of the financial crisis, commission income from the distribution of bonds and funds decreased significantly. With improved market sentiments and liquidity in the second quarter of 2009, the stock market experienced a strong rebound. Leveraging its strong distribution network and trading platform, the Group seized business opportunities arising from increased stock trading transactions and successfully grew its stock broking income by HK\$336 million or 26.1%. Meanwhile, the income from BOC Life also rose by HK\$281 million, or more than fivefold, to HK\$334 million mainly driven

by the decrease in net insurance benefits and claims as long-term interest rate rose. This increase was partially offset by the increase in net loss on financial instruments designated at fair value through profit or loss.

Compared to the second half of 2008, total investment and insurance income soared by HK\$1,722 million or more than fourfold. Investment and insurance fee income increased by HK\$520 million or 42.6% with significant growth in fee income from stock broking. BOC Life recorded an insurance and investment income of HK\$334 million compared to a loss of HK\$868 million in the second half of 2008 caused by the widening of credit spread and low interest rates last year.



**Net Trading Income**

HK\$'m	<b>Half-year ended 30 June 2009</b>	Half-year ended 31 December 2008	Half-year ended 30 June 2008
Foreign exchange and foreign exchange products	<b>790</b>	934	875
Interest rate instruments	<b>28</b>	(333)	206
Equity instruments	<b>17</b>	(16)	135
Commodities	<b>54</b>	92	21
Net trading income	<b>889</b>	677	1,237

Net trading income declined by HK\$348 million or 28.1% year-on-year to HK\$889 million due to the decrease in the net trading income from foreign exchange and related products, interest rate instruments as well as equity instruments.

Net trading income from foreign exchange and related products fell by HK\$85 million or 9.7%. Amid the global economic downturn and the contraction of merchandise trade, the demand for foreign exchange was weak. In addition, RMB-related foreign currency transactions decreased significantly as the market's anticipated appreciation of RMB no longer prevailed. The business volume of structured deposits also plunged. As a result, the related income from foreign exchange activities declined by HK\$360 million or 36.5%. The decrease was partially offset by the increase in the mark-to-market

gain on foreign exchange swap contracts\*. Net trading income from interest rate instruments declined by HK\$178 million or 86.4% mainly due to the mark-to-market loss on certain debt securities investments, partially offset by the increase in mark-to-market gain of interest rate swap contracts. Net trading income from equity instruments decreased by HK\$118 million or 87.4%, mainly as a result of the decline in income from equity-linked instruments.

Compared to the second half of 2008, net trading income rose by HK\$212 million or 31.3%, which was mainly attributable to the mark-to-market gain on interest rate swap contracts recorded in the first half of 2009 compared to a loss in the second half of 2008. The increase was partially offset by the decrease in fair value of certain debt securities investments and the decline in mark-to-market gain on foreign exchange swap contracts\*.

\* 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. Under HKAS 39, the exchange difference between the spot and forward contracts is recognised as foreign exchange gain or loss (as included in "net trading income"), 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 30 June 2009	Half-year ended 31 December 2008	Half-year ended 30 June 2008
Net gain/(loss) on financial instruments designated at FVTPL of the banking operation	180	(224)	(92)
Net (loss)/gain on financial instruments designated at FVTPL of BOC Life	(1,575)	1,256	(1,392)
Net (loss)/gain on financial instruments designated at FVTPL	(1,395)	1,032	(1,484)

Net loss on financial instruments designated at fair value through profit or loss decreased by HK\$89 million or 6.0% year-on-year to HK\$1,395 million, mainly resulting from the mark-to-market gain on certain debt securities of the Group's banking business. Net loss on debt securities of BOC Life rose as their market values were adversely affected by the changes in long-term market interest rates in the first half of 2009.

Compared to the net gain of HK\$1,032 million recorded in the second half of 2008, the Group recorded a net loss of HK\$1,395 million on financial instruments designated at fair value through profit or loss in the first half of 2009. The decline of HK\$2,427 million was mainly attributable to the mark-to-market loss of debt securities investments of BOC Life recorded in the first half of 2009 versus the mark-to-market gain in the second half of 2008 with changes in long-term market interest rates.

**Operating Expenses**

HK\$m, except percentage amounts	Half-year ended 30 June 2009	Half-year ended 31 December 2008	Half-year ended 30 June 2008
Staff costs	2,256	2,072	2,482
Premises and equipment expenses (excluding depreciation)	538	581	495
Depreciation on owned fixed assets	496	512	480
Other operating expenses	904	1,518	631
Operating expenses	4,194	4,683	4,088
Cost-to-income ratio	32.19%	40.77%	29.12%

The Group continued to streamline its costs in the first half of 2009 by implementing a number of cost containment measures in view of the uncertain economic environment. As a result, core operating expenses were well contained.

Total operating expenses were up HK\$106 million, or 2.6%, year-on-year to HK\$4,194 million, which was

largely attributable to expenses\* mainly relating to the Lehman Brothers Mini-bonds issue ("Mini-bonds issue") totalling HK\$222 million. Cost-to-income ratio rose by 3.07 percentage points year-on-year to 32.19%. Should these expenses\* be excluded, the Group's operating expenses would have been reduced by HK\$116 million or 2.8% year-on-year while the cost-to-income ratio would have risen by merely 1.37 percentage point to 30.49%.

\* including the related legal expenses

## MANAGEMENT'S DISCUSSION AND ANALYSIS

Staff costs dropped by HK\$226 million, or 9.1%, primarily due to the reduction in performance-related remuneration, which was partially offset by the increase in salaries after the pay rise in April 2008. Compared to end-June 2008, headcount measured by full-time equivalents fell by 3.0% to 13,209 at end-June 2009.

Premises and equipment expenses increased by HK\$43 million or 8.7% mainly because of higher rental costs.

Other operating expenses were up HK\$273 million, or 43.3%, primarily due to the expenses\* mainly related to the Mini-bonds issue.

Compared to the second half of 2008, total operating expenses fell by HK\$489 million, or 10.4%, largely due to the decline in expenses\* mainly related to the Mini-bonds issue which amounted to HK\$222 million and HK\$769 million in the first half of 2009 and the second half of 2008 respectively. In addition, a non-recurring reversal of performance-related expense was made in the second half of 2008. Should these expenses\* be excluded and the reversal be adjusted, core operating expenses would have recorded a decrease due to lower IT and promotional expenses.

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

HK\$'m	Half-year ended 30 June 2009	Half-year ended 31 December 2008	Half-year ended 30 June 2008
Net Reversal/(Charge) of loan impairment allowances			
Individual assessment			
– new allowances	<b>(163)</b>	(671)	(142)
– releases	<b>87</b>	21	62
– recoveries	<b>142</b>	535	187
Collective assessment			
– new allowances	<b>(198)</b>	(492)	(199)
– releases	<b>174</b>	3	7
– recoveries	<b>18</b>	14	14
Net credit/(charge) to Income Statement	<b>60</b>	(590)	(71)

In the first half of 2009, the Group recorded a net reversal of loan impairment allowances of HK\$60 million. Compared to a net charge of HK\$71 million in the first half of 2008, the net reversal was mainly due to the increase in release of allowances from collective assessment. The release of allowances from collective assessment of HK\$174 million was primarily due to the improvement in asset quality of loans and advances under the Group's stringent risk management and the stabilizing economic environment since the second quarter of 2009.

Compared to the second half of last year, the new allowances from both individual and collective assessment reduced. The decrease in new allowances from individual assessment was primarily due to the impairment of loans that occurred mainly in the second half of 2008 when the global financial crisis intensified. Net impairment charge from collective assessment dropped as the overall asset quality of loans and advances improved in the first half of 2009 relative to the deterioration in the second half of last year. These positive effects were partially offset by the lower recoveries made.

\* including the related legal expenses

**Net Charge of Impairment Allowances on Securities Investments**

HK\$'m	Half-year ended 30 June 2009	Half-year ended 31 December 2008	Half-year ended 30 June 2008
Held-to-maturity securities	(439)	(3,099)	(962)
Available-for-sale securities	(729)	(6,652)	(1,187)
Net charge of impairment allowances on securities investments	<b>(1,168)</b>	(9,751)	(2,149)

The stabilisation of the capital markets in the second quarter of 2009 had a favourable impact on the Group's securities investments and hence the related provisions. The Group's total net charge of impairment allowances on securities investments decreased significantly by HK\$981 million, or 45.6%, year-on-year to HK\$1,168 million. The Group recorded a net charge of impairment allowances of HK\$2,730 million in 2008 against its investments in

The Bank of East Asia, Limited ("BEA"). The share price of BEA rose at end-June 2009 relative to end-2008. However, according to the accounting policies, the favourable change in fair value has been made through the reserve for fair value change of available-for-sale securities within equity. The table below illustrates the breakdown of the Group's net charge of impairment allowances against its investments in securities in the first half of 2009.

HK\$'m	Half-year ended 30 June 2009	Half-year ended 31 December 2008	Half-year ended 30 June 2008
<b>US non-agency residential mortgage-backed securities</b>			
Subprime	(23)	102	420
Alt-A	(173)	(1,079)	(655)
Prime	(1,016)	(5,127)	(1,914)
	<b>(1,212)</b>	(6,104)	(2,149)
<b>Other debt securities</b>	<b>44</b>	(917)	–
Sub-total	<b>(1,168)</b>	(7,021)	(2,149)
<b>Investment in Bank of East Asia, Limited</b>	–	(2,730)	–
<b>Total net (charge)/reversal of impairment allowances on securities investments</b>	<b>(1,168)</b>	(9,751)	(2,149)

For details about the composition of the Group's investment securities portfolio, please refer to Note 24 to the Interim Financial Information.

Compared to the second half of 2008, the net charge of impairment allowances declined significantly by HK\$8,583 million or 88.0%.

Excluding Mini-bonds, the carrying value of the Group's exposure to bonds issued by Lehman Brothers (comprising solely senior unsecured bonds) as at 30 June 2009 was HK\$53 million with the accumulative impairment allowances of HK\$323 million. This carrying value represented an increase of HK\$14 million, or 35.9%, from the end of last year, mainly caused by a net reversal of impairment allowances due to changes in market value of the aforesaid bonds.

**Property Revaluation**

HK\$'m	<b>Half-year ended 30 June 2009</b>	Half-year ended 31 December 2008	Half-year ended 30 June 2008
Net gain/(loss) on revaluation of premises	<b>4</b>	(16)	(8)
Net gain/(loss) on fair value adjustments on investment properties	<b>527</b>	(833)	701
Deferred tax	<b>(82)</b>	146	(53)
Net gain/(loss) on fair value adjustments on investment properties, after tax	<b>445</b>	(687)	648

The aggregate impact of property revaluation before tax on the income statement for the first half of 2009 was HK\$531 million, which comprised a net gain of HK\$527 million from the revaluation of investment properties and a net gain of HK\$4 million from the revaluation of premises. The related deferred tax charge on revaluation of investment properties amounted to HK\$82 million. As a result, the net impact of fair value adjustments on investment properties after tax for the first half of 2009

was HK\$445 million. The net gain on property revaluation was in line with the increase in property prices in the first half of 2009.

Compared to a net loss of HK\$687 million from revaluation of investment properties after tax recorded by the Group in the second half of 2008, the Group recorded a net gain from revaluation of investment properties in the first half of 2009.

**Financial Position**

HK\$m, except percentage amounts	<b>At 30 June 2009</b>	At 31 December 2008
Cash and balances with banks and other financial institutions	<b>113,032</b>	153,269
Placements with banks and other financial institutions maturing between one and twelve months	<b>111,655</b>	89,718
Hong Kong SAR Government certificates of indebtedness	<b>36,570</b>	34,200
Securities investments <sup>1</sup>	<b>329,308</b>	335,493
Advances and other accounts	<b>485,356</b>	469,493
Fixed assets and investment properties	<b>32,087</b>	30,522
Other assets <sup>2</sup>	<b>38,142</b>	34,549
<b>Total assets</b>	<b>1,146,150</b>	1,147,244
Hong Kong SAR currency notes in circulation	<b>36,570</b>	34,200
Deposits and balances of banks and other financial institutions	<b>77,116</b>	88,779
Deposits from customers	<b>820,977</b>	802,577
Debt securities in issue at amortised cost <sup>3</sup>	<b>136</b>	1,042
Insurance contract liabilities	<b>27,695</b>	28,274
Other accounts and provisions <sup>4</sup>	<b>60,351</b>	80,501
Subordinated liabilities <sup>5</sup>	<b>27,339</b>	27,339
<b>Total liabilities</b>	<b>1,050,184</b>	1,062,712
Minority interests	<b>1,817</b>	1,813
Capital and reserves attributable to the equity holders of the Company	<b>94,149</b>	82,719
<b>Total liabilities and equity</b>	<b>1,146,150</b>	1,147,244
<b>Loan-to-deposit ratio</b>	<b>57.66%</b>	56.74%

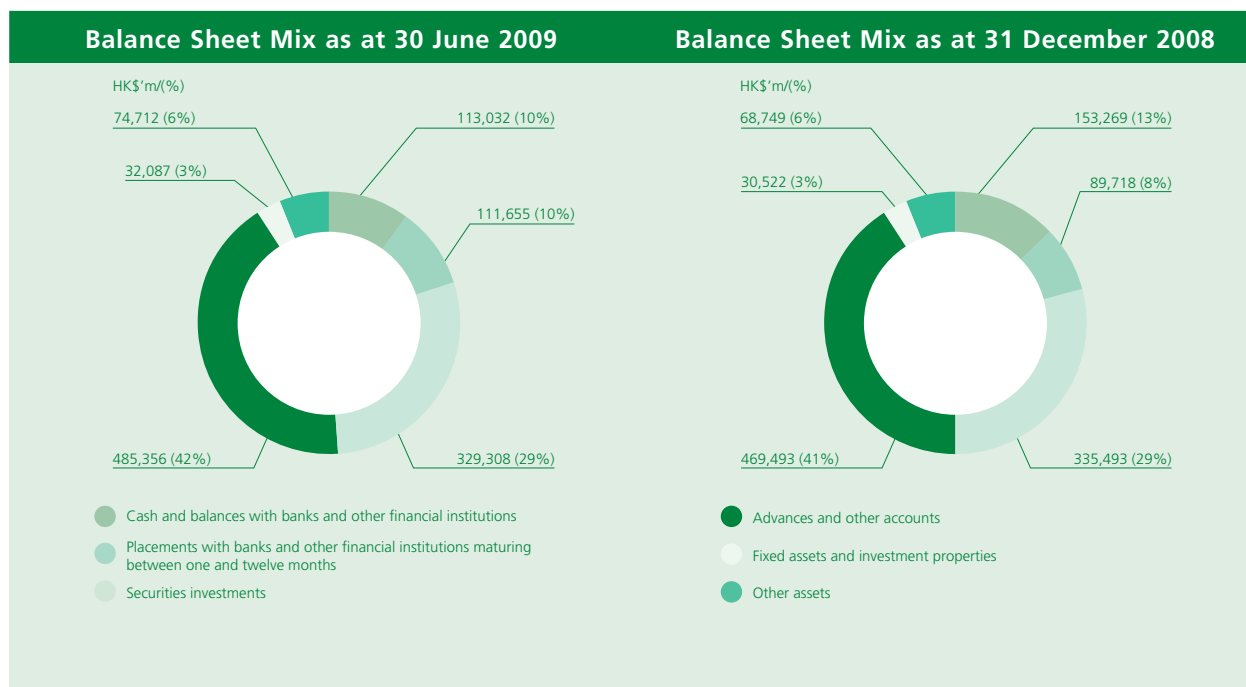
1 Securities investments comprise investment in securities and financial assets at fair value through profit or loss.

2 Interests in associates, deferred tax assets and derivative financial assets are included in other assets.

3 Debt securities in issue at amortised cost represents the notes issued under the Group's notes programme.

4 Financial liabilities at fair value through profit or loss, derivative financial liabilities, current tax liabilities and deferred tax liabilities are included in other accounts and provisions

5 Subordinated liabilities represents the subordinated loan granted by the Group's parent bank, Bank of China Limited.



The Group's total assets were HK\$1,146,150 million as at 30 June 2009, down HK\$1,094 million or 0.1% from the end of 2008. Key changes include:

- Cash and balances with banks and other financial institutions decreased by HK\$40,237 million or 26.3% as funds were redeployed to grow advances to customers and placements with banks and other financial institutions maturing between one and twelve months.
- Placements with banks and other financial institutions maturing between one and twelve months increased by HK\$21,937 million or 24.5%. During the period, the Group lengthened the maturity of its interbank placements for higher return.
- Advances and other accounts increased by HK\$15,863 million, or 3.4%, primarily due to the growth of advances to customers by HK\$15,117 million, or 3.3%.
- Securities investments decreased by HK\$6,185 million, or 1.8%. The Group redeployed its residual funds by expanding its investments in debt securities of government-related and government-guaranteed securities. As of 30 June 2009, the carrying value of the Group's total exposure to US non-agency RMBS dropped to HK\$14.9 billion from HK\$19.3 billion as of end-2008. The Group had exposures to structured investment vehicles ("SIV"s) held by its 51% owned subsidiary, BOC Life. The carrying value of total exposure to the SIV's amounted to HK\$2 million at end-June 2009 compared to approximately HK\$57 million at end-2008.

### Advances to Customers

HK\$m, except percentage amounts	At 30 June 2009		At 31 December 2008	
	HK\$m	%	HK\$m	%
Loans for use in Hong Kong	361,272	75.9	336,597	73.1
Industrial, commercial and financial	213,386	44.8	188,774	41.0
Individuals	147,886	31.1	147,823	32.1
Trade finance	25,052	5.3	24,555	5.3
Loans for use outside Hong Kong	89,240	18.8	99,295	21.6
<b>Total advances to customers</b>	<b>475,564</b>	<b>100.0</b>	<b>460,447</b>	<b>100.0</b>

Notwithstanding a general decline in loan balance in the Hong Kong market in the first half of 2009, the Group's total advances to customers grew by HK\$15,117 million, or 3.3% to HK\$475,564 million. The increase was primarily driven by the growth in corporate loans and trade finance. This was attributable to the successful implementation of the Group's business strategies, effective marketing as well as the Bank's role as the "Asia-Pacific Syndicated Loan Centre" of the BOC Group.

Loans for use in Hong Kong grew by 7.3%.

- Lending to the industrial, commercial and financial sectors increased by HK\$24,612 million, or 13.0%, to HK\$213,386 million, covering a wide range of industries.
- Residential mortgage loans (excluding those under the Government-sponsored Home Ownership Scheme) was up HK\$1,864 million, or 1.6%, to HK\$118,167 million.
- Card advances declined slightly by HK\$61 million, or 0.9%, to HK\$6,492 million.
- Other individual lending decreased by HK\$1,051 million, or 9.1%, to HK\$10,439 million mainly due to early repayment by certain large accounts.

Trade finance rose by HK\$497 million or 2.0% from end-2008 despite the decline in Hong Kong's merchandised trade in the first half of 2009. Meanwhile, loans for use outside Hong Kong decreased by HK\$10,055 million or 10.1%, due mainly to the early repayment by a number of large accounts and the slowdown in the Group's Mainland operation's loan business.

### Deposits from Customers\*

HK\$m, except percentage amounts	At 30 June		At 31 December	
	2009	%	2008	%
Demand deposits and current accounts	59,520	7.2	46,042	5.7
Savings deposits	450,060	54.5	377,273	46.5
Time, call and notice deposits	311,397	37.8	379,262	46.7
	820,977	99.5	802,577	98.9
Structured deposits	3,767	0.5	8,939	1.1
Deposits from customers	824,744	100.0	811,516	100.0

\* including structured deposits

Deposits from customers increased by HK\$13,228 million, or 1.6%, to HK\$824,744 million, with an improved deposit mix. Demand deposits and current accounts rose by HK\$13,478 million, or 29.3%. Savings deposits increased by HK\$72,787 million, or 19.3%. Time, call and notice deposits were down HK\$67,865 million, or 17.9% as customers continued to seek liquidity under the low interest rate environment and switched their funds to more liquid savings deposits. Structured deposits, a hybrid of retail deposits and derivatives offering a higher nominal interest rate, decreased by HK\$5,172 million, or 57.9% amid the adverse market sentiments. The Group's loan-to-deposit ratio was up 0.92 percentage point to 57.66% at the end of June 2009 as total loan growth outpaced deposits growth.



**Loan Quality**

HK\$m, except percentage amounts	<b>At 30 June 2009</b>	At 31 December 2008
Advances to customers	<b>475,564</b>	460,447
Classified or impaired loan ratio <sup>1</sup>	<b>0.37%</b>	0.46%
Impairment allowances	<b>2,020</b>	2,301
Regulatory reserve for general banking risks	<b>4,618</b>	4,503
Total allowances and regulatory reserve	<b>6,638</b>	6,804
Total allowances as a percentage of advances to customers	<b>0.42%</b>	0.50%
Total allowances and regulatory reserve as a percentage of advances to customers	<b>1.40%</b>	1.48%
Impairment allowances on classified or impaired loan ratio <sup>2</sup>	<b>38.05%</b>	38.96%
Residential mortgage loans <sup>3</sup> – delinquency and rescheduled loan ratio <sup>4</sup>	<b>0.07%</b>	0.05%
Card advances – delinquency ratio <sup>4,5</sup>	<b>0.35%</b>	0.29%

	<b>Half-year ended 30 June 2009</b>	Half-year ended 30 June 2008
Card advances – charge-off ratio <sup>5</sup>	<b>3.14%</b>	2.14%

1 Classified or impaired loans represent advances which have been classified as “substandard”, “doubtful” or “loss” under the Group’s classification of loan quality, or individually assessed to be impaired. Repossessed assets are initially recognised at the lower of their fair value less costs to sell or the amortised cost of the related outstanding loans on the date of repossession. The related loans and advances are deducted from loans and advances.

2 Including 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 Excluding Great Wall cards and computed according to the HKMA’s definition.

The Group’s loan quality continued to improve with the classified or impaired loan ratio falling to 0.37% from 0.46% as at end 2008. Classified or impaired loans decreased by approximately HK\$364 million, or 17.0%, to HK\$1,774 million mainly due to write-offs and collections. New classified loans remained at a low level, representing approximately 0.1% of total loans outstanding.

Total impairment allowances, including both individual assessment and collective assessment, amounted to HK\$2,020 million. Impairment allowances on classified or impaired loan ratio were 38.05%. The Group’s regulatory reserve rose by HK\$115 million to HK\$4,618 million as advances to customers increased.

The quality of the Group’s residential mortgage loans remained sound with the combined delinquency and rescheduled loan ratio rising slightly by 0.02 percentage point to 0.07% at the end of June 2009. The quality of card advances remained good with the charge-off ratio of 3.14% in the first half of 2009.

**Capital and Liquidity Ratios**

HK\$m, except percentage amounts	<b>At 30 June 2009</b>	At 31 December 2008
Core capital	<b>70,905</b>	65,172
Deductions	<b>(3,664)</b>	(1,536)
Core capital after deductions	<b>67,241</b>	63,636
Supplementary capital	<b>32,710</b>	32,675
Deductions	<b>(3,664)</b>	(1,536)
Supplementary capital after deductions	<b>29,046</b>	31,139
Total capital base after deductions	<b>96,287</b>	94,775
Risk-weighted assets		
Credit risk	<b>555,584</b>	545,107
Market risk	<b>10,873</b>	9,097
Operational risk	<b>45,676</b>	44,144
Deductions	<b>(14,080)</b>	(12,273)
Total risk-weighted assets	<b>598,053</b>	586,075
Capital adequacy ratios (banking group level)		
Core capital ratio	<b>11.24%</b>	10.86%
Capital adequacy ratio	<b>16.10%</b>	16.17%
	<b>Half-year ended 30 June 2009</b>	Half-year ended 30 June 2008
Average liquidity ratio	<b>39.70%</b>	42.47%

The Group adopted the Standardised Approach in calculating capital adequacy ratios, in accordance with the Banking (Capital) Rules effective from 1 January 2007.

Consolidated capital adequacy ratio of the banking group at 30 June 2009 was 16.10%, down 0.07 percentage point from end-2008. Total capital base rose by 1.6% to HK\$96,287 million following the increase in retained earnings and decrease in the deficit value of reserve for fair value changes of available-for-sale securities. Risk-weighted assets increased by 2.0% to HK\$598,053 million, mainly driven by growth in interbank placements and advances to customers.

The average liquidity ratio in the first half of 2009 was 39.70%, 2.77 percentage points lower than that in the corresponding period of 2008. To cope with the changing business environment, BOCHK adjusted its asset structure. Because of the uncertainty in the global credit market since end of 2008, BOCHK increased holdings in high liquid government papers. Along with the liquidity injection into financial markets by central governments, global interest rates approached record low levels. On the back of the increment of high liquid assets, BOCHK extended the duration of interbank placement and therefore resulting in a slight decrease in average liquidity ratio.

## BUSINESS REVIEW

This section covers the review of the Group's business lines together with their respective financial results.

### Personal Banking

HK\$m, except percentage amounts	Half-year ended 30 June 2009	Half-year ended 30 June 2008	Increase/ (decrease)
Net interest income	2,849	3,330	-14.4%
Other operating income	2,218	2,532	-12.4%
Operating income	5,067	5,862	-13.6%
Operating expenses	(2,771)	(2,879)	-3.8%
Operating profit before impairment allowances	2,296	2,983	-23.0%
Net charge of loan impairment allowances	(74)	(14)	+428.6%
Others	(6)	(4)	+50.0%
Profit before taxation	2,216	2,965	-25.3%

	At 30 June 2009	At 31 December 2008	Increase/ (decrease)
Segment assets	169,513	165,148	+2.6%
Segment liabilities	558,739	523,682	+6.7%

Note: For additional segmental information, see Note 41 to the Interim Financial Information.

### Results

Personal Banking recorded a profit before taxation of HK\$2,216 million in the first half of 2009. Operating profit before impairment allowances declined by 23.0% to HK\$2,296 million mainly due to the fall in both net interest income and other operating income.

Net interest income decreased by 14.4% primarily due to narrower deposits spread amidst the low interest rate environment. Other operating income was down by 12.4% because of the decline in fee income from the distribution of funds and bonds coupled with the decrease in net trading income from foreign exchange activities and structured products as market sentiments were weak.

However, taking advantage of the stock market's rebound in the second quarter, the Group managed to grow its income from its stock brokerage business.

Net charge of loan impairment allowances rose to HK\$74 million, mainly due to increased credit card receivables compared to the same period last year and the deterioration of cardholders' debt servicing capability in the economic downturn.

Advances and other accounts, including mortgage loans and card advances, increased by 1.0% to HK\$153,755 million. Customer deposits rose by 6.6% to HK\$533,566 million.

### **Regaining growth momentum in residential mortgages in the second quarter**

Seizing new business opportunities arising from the revival of the local property market in the second quarter of 2009, the Group achieved satisfactory results in the underwriting of new mortgages through effective marketing and the introduction of a wider range of mortgage products. In the first half of 2009, the Group launched the "Fixed-Rate Mortgage Schemes" with different tenors to enable customers to lock in the mortgage rate during the fixed rate period, thus protecting them from any potential interest rate fluctuations. The Group also maintained its partnership and participated in joint promotions with major property developers in most of the prime property development projects. These initiatives helped sustain the Group's market position in the underwriting of new mortgages. By the end of June 2009, the Group's outstanding residential mortgage loans grew by 1.6% from the end of 2008. In view of the economic downturn, the Group continued with rigorous risk assessment and control in its mortgage business. By the end of June 2009, the credit quality of residential mortgages remained sound with the delinquency and rescheduled loan ratio standing at a low level of 0.07%.

### **Growing stock brokerage and maintaining competitive edge in insurance**

The investment market remained challenging in the first quarter of 2009 because of the volatility of the financial markets and the global economic downturn. In the second quarter, the situation became more stable and the rebound of the local stock market helped drive the growth of the Group's stock broking income. Given its strong distribution network and trading platform, the Group was able to capture new business opportunities from the more active stock market and attained strong business growth. The Group refined and promoted its "Monthly Stocks Savings Plan" for targeted customers by offering handling fee rebates for newly set up stock saving plans. In June 2009, the Group launched promotions on its securities margin trading service by offering commission

discount and special lending rate. Meanwhile, the online share margin function has been enhanced to make it more convenient for customers to transfer and withdraw share margin deposits via e-banking. As a result, the volume of the Group's stock broking business registered a year-on-year increase of 7.9%. Its market share also rose to a record high in recent years.

Regarding its Bancassurance business, the Group continued with a customer-oriented approach by expanding its product range and tailoring new products for customers. The Group launched a new medical protection product "BOC Medical Comprehensive Protection Plan (Series 1)" which covers customers' entire family with a wide range of coverage, including hospitalisation, dental care, out-patient service, maternity and critical illnesses. In addition, the Group also promoted its brand image and market awareness through a series of marketing campaigns with the help of various attractive incentives. Meanwhile, the Group continued to provide its staff with extensive training aimed at reinforcing product proficiency, sales professionalism and market intelligence.

### **Enhancing relationship with high net worth customers**

The Group strives to maintain long-term customer relationship with its wealth management customers. During the period, the Group introduced the "New Customer Engagement Programme" to acquire new wealth management customers and strengthen customer relationship. In addition, the Group developed an "Anti-attrition Model" for customer retention. The Group also collaborated with BOC in expanding the cross-border wealth management service. To raise the overall efficiency, the Group enhanced the operating procedure of the "Cross Border Attestation Service" with BOC branches in 17 Mainland cities. At the end of June 2009, the total number of wealth management customers\* and their assets maintained with the Group grew by 3.5% and 15.7% respectively versus end-2008.

\* Including wealth management VIP and wealth management Prime customers

### Steady growth in credit card business

Despite the global financial crisis and the outburst of Influenza A (H1N1) that might have affected consumer spending, the Group's card business maintained satisfactory growth in the first half of 2009. The number of cards issued grew by 10.1% from the end of 2008. Cardholder spending volume registered an increase of 1.4%. Merchant acquiring volume grew by 5.8% due mainly to the increase in the acquiring business of China UnionPay ("CUP"). Meanwhile, the launch of "BOC CUP Dual Currency Credit Card" in December 2008 received overwhelming response from customers with the number of cards issued surging beyond 200,000 at the end of June 2009. At the same time, the Group continued to extend appealing merchant offer programmes to customers through its comprehensive merchant network throughout Hong Kong, Macau and the Mainland. In May 2009, the Group introduced the "CUP-Secure Internet Payment Service" to allow merchants to offer secure internet payment services to their customers particularly in the Mainland. At the end of June 2009, the Group's loan quality of card advances remained sound with the annualised charge-off ratio standing at 3.14%.

The Group's success in developing its credit card business was widely recognised in the industry, as evidenced by an array of 28 awards received from VISA International, MasterCard and China UnionPay.

### Growing and maintaining market leadership in RMB banking business in Hong Kong

The Group remained the market leader in RMB banking business in Hong Kong. During the period, the Group focused on the RMB integrated services, "RMB Remittance Express" and "RMB Exchange Express" and launched promotional offers to boost its market share of RMB deposits with good results. The Group also secured its leading position in the RMB card issuing business. The number of RMB credit cards issued increased strongly by

96.4% from end-2008 while RMB cardholder spending volume registered an equally strong growth of 90.8% year-on-year. With the RMB clearing services for trade settlement in Hong Kong officially launched on 6 July 2009, the Group conducted the first RMB trade settlement transaction in Hong Kong through the clearing channel for one of its corporate clients on the same day (For details, please refer to the section on the Group's trade finance business discussed under Corporate Banking on page 32).

### Channel rationalisation and e-channel development

The Group continued to rationalise its distribution channels. In response to the changing economic environment and new business opportunities, the Group revamped its branch network to meet the needs of different customer segments. At the end of June 2009, the Group's service network in Hong Kong comprised of 280 branches, 104 Wealth Management Prime centres and 21 Wealth Management VIP centres.

To encourage the customers to use automated banking facilities, the Group continuously enhanced its service network by installing new ATMs, cheque deposit machines and cash deposit machines. It also launched the payment collection feature of its cheque deposit machines.

The Group successfully seized business opportunities from the revival of the local stock market by expanding the capacity of automated stock trading telephone lines and enhancing its online stock margin trading function. At the same time, the Group launched the new online application for credit card and insurance services and extended online trading hours of certain businesses, providing customers with more efficient e-banking services. The number of personal e-banking customers increased by 3.1% from the end of last year while stock trading transactions carried out through e-channels accounting for 75.8% of total transactions in the first half of 2009.

**Corporate Banking**

HK\$m, except percentage amounts	Half-year ended	Half-year ended	
	30 June 2009	30 June 2008	Increase/ (decrease)
Net interest income	2,644	2,972	-11.0%
Other operating income	1,197	1,132	+5.7%
Operating income	3,841	4,104	-6.4%
Operating expenses	(1,039)	(1,081)	-3.9%
Operating profit before impairment allowances	2,802	3,023	-7.3%
Net release/(charge) of loan impairment allowances	134	(57)	+335.1%
Others	(1)	(3)	-66.7%
Profit before taxation	2,935	2,963	-0.9%

	At 30 June 2009	At 31 December 2008	Increase/ (decrease)
Segment assets	338,687	324,606	+4.3%
Segment liabilities	293,447	309,254	-5.1%

Note: For additional segmental information, see Note 41 to the Interim Financial Information.

**Results**

Corporate Banking registered a profit before taxation of HK\$2,935 million in the first half of 2009. Net interest income decreased but was offset by the increase in net fees and commission income and a net release of loan impairment allowances. As a result, profit before taxation declined slightly by 0.9%.

Because of narrower deposit spread resulting from the decline in market interest rates, net interest income decreased by 11.0% despite the increase in average loans and advances and the improvement in the average pricing of new corporate loans. Other operating income rose by 5.7%, primarily attributable to the growth in fee income from the lending business.

Net release of loan impairment allowances was HK\$134 million in the first half of 2009, compared to the net charge of HK\$57 million in the first half of 2008. The net release reflected the improved asset quality of the segment.

Advances and other accounts increased by 4.3% to HK\$337,244 million. Customer deposits fell by 5.0% to HK\$290,412 million.

**Solid expansion of corporate lending business**

Notwithstanding weak loan demand in the market in general, the Group managed to attain solid growth in its corporate lending business. At the end of June 2009, the outstanding balance of the Group's corporate loan portfolio rose by 4.5% over end-2008. Meanwhile, the Group remained the top mandated arranger in the Hong Kong-Macau syndicated loan market. The Group, in its position as the BOC Group's "Asia-Pacific Syndicated Loan Centre", further expanded its loan syndication business in the region. During the first half of 2009, the Group completed several large syndication loans, thus helping to strengthen the BOC Group's market position in the Asia-Pacific region. After the launch of the first phase of its "Loan Syndication Information Management System" last year, the Group proceeded with the second phase in the first half of this year. This new system links up similar networks of the BOC Group's major branches in the Asia-Pacific region, thus strengthening information management and enhancing overall operational efficiency in the region.

### **Developing SME business and receiving market recognition**

In support of the HKSAR Government's initiatives to help SME businesses, the Group devoted additional resources to promoting the "SME Loan Guarantee Scheme" and "Special Loan Guarantee Scheme", which help enterprises secure loans from participating banks for meeting general business needs with the Government acting as the guarantor. In May 2009, the Group launched the "BOC Octopus Merchant Services", providing merchants with a one-stop cash management solution for customer payment and transaction settlement as well as comprehensive financial management services. The new services were well received, with over 500 merchants already enrolled at the end of June 2009. In recognition of its quality services and contribution to the SME business, the Group was, for second consecutive year, granted the "SME's Best Partner Award 2009" by the Hong Kong Chamber of Small and Medium Business Limited.

### **Achieving breakthrough in cross-border trade settlement and finance business**

During the first half of 2009, the Group introduced a series of cross-border trade finance products and enhanced collaboration with its parent, BOC, while continuing to streamline the credit approval process and improve the credit utilisation rate via the "Trade Facilities Reform Programme" launched in 2008. Following a contraction in the first quarter, the volume of trade bills settlement and trade finance rebounded visibly as the economic environment became more stable in the second quarter. The Group also made good progress in the area of cross-border trade settlement. Following the initiation of the "Administrative Rules on Pilot Programme of Renminbi Settlement of Cross-Border Trade Transactions", the Group, being the sole RMB clearing bank in Hong Kong, signed the "Clearing Agreement in Relation to Renminbi Business" with the People's Bank of China ("PBOC") on 4 July 2009. These new RMB clearing services not only became a favourable platform for the use of RMB outside the Mainland in an orderly manner, but also broadened the scope of RMB services in Hong Kong. On 6 July 2009, the Group pioneered the first RMB trade settlement transaction in Hong Kong through the clearing channel for one of its corporate clients. By leveraging its expertise in trade services and trade finance for businesses in the

Mainland and Hong Kong, the Group has established itself as a pioneer in the provision of RMB-denominated trade and finance services. On top of these, the Group has enhanced its "RMB Merchant Link" service to provide a one-stop solution for its corporate customers, facilitating their cash management while helping them hedge against exchange rate risk arising from cross-border trade.

### **Making good progress in cash management**

The Group made good progress in developing its cash management business. Following its designation in March 2009 as the USD settlement bank in Hong Kong for the Real Time Gross Settlement System linkage between Hong Kong and the Mainland, the Group has been actively marketing this new service and BOC Remittance Plus to customers. In June 2009, the Group launched a new express collection service for its clients to collect funds from their customers who hold deposit accounts with the Group. This service not only enhances the Group's competitive edge by capturing higher transaction volume but also encourages its clients to use their accounts at the Group as their major operating accounts. At the end of June 2009, the remittance points of BOC Remittance Plus were over 2,900 while the number of CBS Online customers and BOC Wealth Master customers increased by 23.0% and 2.5% respectively.

### **Strengthening fundamentals in custody services for market recovery**

To prepare for the recovery of both the IPO and QDII markets, the Group further strengthened its customer relationship and product fundamentals. Meanwhile, the Group continued to work closely with BOC to explore new business opportunities. At the end of June 2009, total assets under the Group's custody were valued at HK\$291 billion, representing an increase of 45.5% from end-2008.

### **Closer business collaboration with Bank of China**

The Group continued to work closely with its parent, BOC, in business development. With the latter's support, the Group began to implement the pilot scheme of "Global Relationship Manager" in April. This scheme, which will be implemented in phases, enables the Group to consolidate global credit facilities and enhance overall service capability for serving its high-end corporate customers.

### **Implementation of proactive measures in risk management**

As the business environment basically remained uncertain in the first half of 2009, the Group continued to focus on safeguarding its asset quality by closely monitoring its corporate customers from various business segments, especially those more severely affected by the global economic downturn. Market information was shared among the three banks of the Group to strengthen overall warning and monitoring capabilities. The Group also stepped up its management of credit risks before and after credit approval. All these initiatives facilitated the Group's formulation of risk mitigation measures at an early stage.

### **Mainland Business**

#### **Expanding service scope and network in the Mainland**

The Group continued to expand its cross-border financial services to better serve both personal and corporate customers. With the opening of NCB (China)'s Shanghai Xuhui Sub-branch in January; Beijing Jianguomen Sub-branch in May; Chengdu Branch in June together with the opening of Xiamen Jimen Sub-branch of Chiyu Banking Corporation Limited in March, the Group's total number of branches and sub-branches in the Mainland increased to 22 by the end of June 2009. Of these, twelve had been approved to conduct the full range of RMB businesses, nine had been permitted to conduct RMB businesses to non-Mainland residents and the remaining one to operate foreign exchange businesses only. The Group

has established strategic alliances with a few insurance companies for the purpose of cross-selling various general and life insurance products to the customers. At the same time, the Group launched a range of deposits products such as "club deposits", "premium product" and "non-standardised fixed deposits". The Group also promoted diversified mortgage products, such as "All-You-Want Mortgage Scheme". Having obtained the approval of the China Banking Regulatory Commission ("CBRC") on 4 May 2009, Mainland branches and sub-branches of BOCHK were permitted to restructure into NCB (China). BOCHK's Shanghai Branch was restructured and renamed as Nanyang Commercial Bank, Limited's Shanghai Branch for conducting foreign currency wholesale banking business. After preparing for the above mentioned restructuring, which became effective on 1 August 2009, the related branches commenced business in their new status on 3 August 2009. This restructuring not only enables the Group to fully explore the potential of its Mainland business and capitalise on the Group's unique strengths, but also signifies a major move by NCB (China) to expand its business network.

In terms of business performance, customer deposits grew by 6.3%, of which RMB deposits increased by 10.5% during the first half of 2009. Total advances to customers fell by 9.9%, and RMB loans dropped by 13.5%, due to early repayment by a number of large accounts. Loan quality remained good, with the classified loan ratio at 0.48%, down 0.40 percentage point from 0.88% at end of 2008.



**Treasury**

HK\$m, except percentage amounts	<b>Half-year ended 30 June 2009</b>	Half-year ended 30 June 2008	Increase/ (decrease)
Net interest income	<b>2,914</b>	3,456	-15.7%
Other operating income	<b>832</b>	933	-10.8%
Operating income	<b>3,746</b>	4,389	-14.7%
Operating expenses	<b>(394)</b>	(431)	-8.6%
Operating profit before impairment allowances	<b>3,352</b>	3,958	-15.3%
Net charge of impairment allowances on securities investments	<b>(1,168)</b>	(2,149)	-45.6%
Profit before taxation	<b>2,184</b>	1,809	+20.7%

	<b>At 30 June 2009</b>	At 31 December 2008	Increase/ (decrease)
Segment assets	<b>581,630</b>	603,965	-3.7%
Segment liabilities	<b>169,588</b>	203,481	-16.7%

Note: For additional segmental information, see Note 41 to the Interim Financial Information.

**Results**

In the first half of 2009, the Treasury segment's profit before taxation rose by 20.7% to HK\$2,184 million. The increase was mainly driven by the decrease in net charge of impairment allowances on securities investments. Operating profit before impairment allowances decreased by 15.3% to HK\$3,352 million mainly due to the fall in net interest income.

Net interest income fell by 15.7% mainly due to the decline in contribution of net free funds under the low interest rate environment and the higher funding cost of subordinated loans.

Other operating income dropped by 10.8% due to the decline in income from equity-linked instruments and net gain on investment securities.

**Maintaining a stable return on residual funds by active asset and liability management**

In the beginning of the year, the global financial markets remained gloomy with large and major banks recording substantial losses that caused general concern on banks'

overall capital adequacies and consequently the stability of the entire financial system. Meanwhile, the global governments responded swiftly and adopted a wide range of fiscal and monetary measures. This had some stabilizing effect on the global financial market since the second quarter of the year by subduing market volatility and narrowing credit spread. The Group took advantage of the steepening yield curve by expanding its investments in high-quality fixed rate debt securities of government-related and government-guaranteed securities and extended the maturity of interbank placements, leading to a stable return amid the low interest rates environment.

In view of the uncertain market environment and economic outlook, the Group continued to implement prudent asset and liability management and proactive strategies in managing its banking book investments. The Group aimed to reduce the overall credit risk of its investment portfolio through natural runoff and selective disposal of higher risk securities. The carrying value of the Group's exposure to US non-agency RMBS dropped by HK\$4.4 billion, or 23.1% from end-2008 to HK\$14.9 billion at end-June 2009. The reduction in exposure was mainly

attributable to disposal and consistent repayment. Of the Group's total exposure to US non-agency RMBS, about 44.7% was originated\* prior to 2006, 49.4% in 2006 and 5.9% in 2007 (Further analysis of the Group's US non-agency RMBS is available in Note 3.1 to the Interim Financial Information).

### Growing traditional businesses while tightening internal controls

The currency and precious metal markets remained volatile in the first half of 2009. While investors' confidence was still in the process of recovery, the Group grasped the opportunity to promote its traditional products related to foreign exchange and precious metals. The Group also focused on providing its corporate customers with hedging

products linked to foreign exchange and interest rate as interest rates remained low. During the period, the Group thoroughly reviewed and updated the relevant internal regulations, selling process and risk disclosure policies for structured treasury products to better safeguard investors' interests. The Treasury Product Committee ("the Committee"), which was set up at the end of 2008, started its operation this year. The Committee is responsible for overseeing and strengthening the management of all treasury products offered by the Group. During the first half of 2009, a series of business strategies and product management guidelines have been discussed and approved by the Committee so that the Group's business development will be in line with the latest supervisory requirements and best market practices.

### Insurance

HK\$m, except percentage amounts	Half-year ended 30 June 2009	Half-year ended 30 June 2008	Increase/ (decrease)
Net interest income	562	538	+4.5%
Other operating income	573	2,955	-80.6%
Operating income	1,135	3,493	-67.5%
Net insurance benefits and claims	(919)	(3,602)	-74.5%
Net operating income	216	(109)	+298.2%
Operating expenses	(61)	(69)	-11.6%
Profit/(Loss) before taxation	155	(178)	+187.1%

	At 30 June 2009	At 31 December 2008	Increase/ (decrease)
Segment assets	31,802	31,703	+0.3%
Segment liabilities	30,932	30,977	-0.1%

Note: For additional segmental information, see Note 41 to the Interim Financial Information.

### Results

The Group's insurance segment recorded a profit before taxation of HK\$155 million. The capital market continued its volatility in the first quarter of 2009 but substantially recovered in the second quarter as a result of improvement in market sentiment. This has helped improve BOC Life's performance in the first half of 2009 relative to the same period last year.

Net interest income rose by 4.5% mainly driven by the increase in debt securities investments in the first half of 2009. Other operating income fell by 80.6% primarily due to lower premium income and the increase in net loss on financial instruments designated at fair value through profit or loss. In the weak market, sales of single premium products declined by 61.7%. In view of the market changes, BOC Life focused on the sales of regular

\* The vintage analysis of US non-agency RMBS was based on their year of first issue.

premium products and achieved a growth of 53.3% on related premium income. Net loss on financial instruments designated at fair value through profit or loss increased mainly due to the mark-to-market loss of its debt securities investments caused by rising long-term market interest rates. At the same time, net insurance benefits and claims were down 74.5% due to changes in interest rates. The decline in net insurance benefits and claims was partially offset by the increase in net loss on financial instruments designated at fair value through profit or loss.

### **Expanding product offerings and developing multi-channel platform**

The Group continued to extend its product range and create new products to meet the changing needs of customers. In the first half of 2009, new regular-premium products such as the "Prosperous Income Rise Insurance Plan" and "Hundred Life Insurance Plan" were introduced. At the same time, "5-Year Joyful Life Insurance Plan II", a new single-premium product, was launched. The Group also allocated more resources for selling regular-premium products to meet customers' needs and controlled its risk exposure under the uncertain investment environment. As a result, the sales of regular-premium products rose by 31% and premium income was up 53.3% year-on-year.

The Group set up a new financial planning team in April 2009 to analyze and take care of clients' needs at different life stages through a "Need-based Selling" approach. Meanwhile, a services assurance unit was also set up to ensure delivery of high-quality professional services to the Group's customers.

### **Capital injection into BOC Life**

On 6 July 2009, BOC Hong Kong (Holdings) Limited ("the Company") injected a capital of HK\$765 million into BOC Life. This followed a previous capital injection on 25 June 2008 involving HK\$255 million. Both capital injections were financed by the Company's internal resources and paid in cash. After the capital injections, BOC Life remains held as to 51% by the Company and 49% by Bank of China Group Insurance Company Limited as both capital injections were on a pro rata basis. BOC Life now has a stronger capital base for development and business growth.

## **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.

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

The Group's risk management governance structure is designed to cover the whole process of all businesses and ensure various risks are properly managed and controlled in the course of conducting business. The Group has a sound risk management organisational structure. It implements 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 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. 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 and Chiyu, are subject to risk policies that are consistent with those of the Group. These subsidiaries execute their risk management strategies independently and report to the Group's management on a regular basis.

### **Credit Risk Management**

Credit risk is the risk that a customer or counterparty will be unable to or unwilling to meet its obligations under a contract. It arises principally from the lending, trade finance and treasury businesses, and covers inter-bank transactions as well as investments in bonds and securities. The Chief Credit Officer reports directly to the CRO and is responsible for the management of credit risk and for the formulation of all credit policies and procedures. The Chief Analytics Officer who reports directly to the CRO is responsible for the development and maintenance of internal rating models and rating criteria. Different credit approval and control procedures are adopted according to

the level of risk associated with the customer, counterparty or transaction. Corporate and financial institution credit applications are generally required to be independently reviewed and objectively assessed by risk management units. For retail exposures, a credit scoring system is used to process retail credit transactions. The Credit Risk Assessment Committee comprising experts from the Group's credit and other functions is responsible for making an independent assessment of all credit facilities which require the approval of a Deputy Chief Executive or above.

The Group's internal loan grading system divides loans 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, RC and Board of Directors to facilitate their continuous monitoring of credit risk.

For investments on debt securities and securitisation assets, the external credit rating and assessment on credit quality of the underlying assets are used for managing the credit risk involved. Credit limits are established on a customer and security issuer basis. For derivatives, the Group sets customer limits to manage the credit risk involved and follows the same approval and control processes as those for loans and advances. Ongoing monitoring and stop-loss procedures are established.

The Group adopted a comprehensive methodology in determining whether a particular asset/mortgage backed security ("ABS/MBS") was impaired. Under the methodology, the Group would not only take into consideration not only the mark-to-market (MTM) price of the issue and its external credit rating, but also other factors including the FICO score, vintage, collateral location, adjustable rate mortgage ("ARM") status, delinquencies, level of collateral protection, loan to value ratio and prepayment speed of the underlying assets. Having considered these factors, the ABS/MBS issue had to further pass the required credit enhancement coverage ratio set by the Group. This ratio was determined by applying assumptions regarding the default rates based on the available delinquency, foreclosure and real estate owned ("REO") data of the ABS/MBS issue.

### Interest Rate Risk Management

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
- 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, e.g. steepening or flattening of 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 Asset and Liability Management Committee ("ALCO") exercises its oversight of interest rate risk and RC sanctions the interest rate risk management policies formulated by ALCO. The interest rate risk is identified and measured on a daily basis. Asset and Liability Management Department ("ALMD") manages the interest rate risk according to the established policies and the results are reported to ALCO regularly. RMD reviews the policies, guidelines and limits proposed by the ALMD.

Gap analysis is one of the tools used to measure the Group's exposure to repricing risk. As the risk is complicated by having optionality embedded in certain products, behavioural assumptions are made to reflect more accurately the interest rate risk exposures. The key assumption in gap analysis includes the replacement of contractual maturity of fixed rate mortgage-backed (US prime and Alt-A) securities by behavioural maturity. This provides the Group with a static view of the maturity and repricing characteristics of its balance sheet positions. The Group uses interest rate derivatives to hedge its interest rate exposures and in most cases, plain vanilla interest rate swaps are used.

Sensitivities of earnings and economic value to interest rate changes (Earnings at Risk and Economic Value at Risk) are assessed through a hypothetical interest rate shock of 200 basis points across the yield curve on both sides. Earnings at Risk and Economic Value at Risk are controlled respectively within an approved percentage of the projected net interest income for the year and the latest capital base as sanctioned by RC. The results are reported to ALCO and RC on a regular basis.

The impact of basis risk is gauged by the projected change in net interest income under scenarios of imperfect correlation in the adjustment of the rates earned and paid on different instruments. Ratios of assets to liabilities with similar pricing basis are established to monitor such risk.

Stress test on yield curve risk is performed to assess the impact on earnings and economic value due to the steepening or flattening of the yield curve. The impact of optionality of demand and savings deposits and prepayment of mortgage loans is also assessed under different stress test scenarios. The prepayment risk of ABS/MBS is assessed by the impact on earnings and economic value using the sensitivity of extended/contracted weighted average life.

Before launching a new product or business, the relevant departments are required to go through a risk assessment process, which includes assessment of underlying interest rate risk and consideration of the adequacy of current risk management mechanism. Any material impact on interest rate risk noted during the risk assessment process will be reported to both the Chief Financial Officer and Chief Risk Officer.

### Market Risk Management

Market risk is the risk of loss that results from movements in market rates and prices. The Group's market risk in the trading book arises from customer-related business and proprietary trading. Trading positions are subject to daily mark-to-market valuation. The risk includes potential losses arising from changes in foreign exchange and interest rates as well as the prices of equities and commodities.

The major market risk in the banking book arises from the Group's bond investment portfolio. The risk includes potential losses arising from changes in market parameters such as credit, liquidity, and interest rate risk. These positions are subject to monthly mark-to-market valuation.

#### *Market risk management framework*

Trading book market risk is managed within various major risk limits approved by the RC, including risk positions and/or risk factor sensitivities. Since April 2007, BOCHK has also formally applied Value-at-Risk (VAR) limit as a daily risk management tool. These overall risk limits are divided into sub-limits by reference to different risk products, including interest rates, foreign exchange rates, commodities and equities. Transactions are classified into different risk product categories according to the prominent type of risk inherent in the transactions.

Market risk arising from the banking book is managed within various risk limits such as P/L Management Alert Limit (P/L MAL) and P/L Management Alert Trigger (P/L MAT) which are approved by ALCO. The mark-to-market result is reported to ALCO on a monthly basis.

As aforesaid, the Group's risk management objective is to enhance shareholder value by maintaining risk exposures within acceptable limits. The Group's market risk management framework comprises three levels. The Board of Directors and its Risk Committee are the ultimate decision-making authorities. The formulation of risk management procedures and the implementation mechanism, and the monitoring of compliance are mainly the responsibility of the Group's senior management (including CE and CRO). RMD is responsible for overseeing the Group's market risk to ensure that overall and individual market risks are within the Group's risk tolerance. Risk exposures are monitored on a day-to-day basis to ensure that they are within established risk limits and are regularly reported to the senior management. Nanyang and Chiyu have their own independent risk monitoring units to monitor limit compliance on a daily basis.

The Group's control of market risk is done by restricting individual operations to trade only a list of permissible instruments authorised by senior management and within various market risk limits approved by the RC. The individual operations are also required to enforce rigorous new product approval procedures to ensure that all risks that arise are thoroughly identified, properly measured and adequately controlled.

The Group also uses the VAR technique to measure potential losses and market risks of its trading book for reporting to the RC and senior management on a periodic basis. VAR is a statistical technique which estimates the potential losses that could occur on risk positions taken over a specified time horizon within a given level of confidence. BOCHK, being the banking entity within the Group with the major trading positions, which are mainly foreign currency positions in major currencies, uses the VAR technique to monitor and control market risk on a daily basis.

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

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

The Group recognises these limitations by augmenting its VAR limits with other position and sensitivity limit structures. Additionally, the Group applies a wide range of stress testing, both on individual portfolios and on the Group's consolidated positions. The stress testing programme of the trading book includes sensitivity testing on changes in risk factors with various degrees of severity, as well as scenario analysis on historical events including the 1987 Equity Market Crash, 1994 Bond Market Crash, 1997 Asian Financial Crisis and the 11 September event in the United States in 2001. The Group's stress-testing regime provides senior management with an assessment of the financial impact of identified extreme events on the market risk exposures of the Group.

### Liquidity Risk Management

The aim of liquidity management is to enable the Group to meet, even under adverse market conditions, all its maturing repayment obligations on time, and to fund all its asset growth and strategic opportunities with reasonable costs.

Liquidity management is carried out both at the Group and subsidiary level. Local bank and subsidiaries are required to maintain a strong daily liquidity position and a healthy cash flow aligning the risk-taking incentives with the liquidity exposures and to make sure all funding obligations are met when due. Subsidiaries are required to report its liquidity position to BOCHK on a frequent and regular basis. During the period under review, the Group has conducted more stress testing under different stress conditions to ensure risks were managed within the Group's tolerance level.

The risk measurement and monitoring process is set under the requirement and guidelines issued by the regulatory authorities and is stated in the policies and procedures endorsed by RC and ALCO. The primary objective of the Group's asset and liability management strategy is to achieve optimal returns while ensuring adequate levels of liquidity and capital within an effective risk control framework. ALCO is responsible for establishing these policy directives (including the liquidity contingency plan), and RC sanctions the liquidity management policies. ALMD manages the liquidity risk according to the established policies and reports to ALCO regularly. RMD reviews

the policies, guidelines and limits proposed by ALMD. Liquidity risk measurements include cash flow analysis (under normal and stress conditions respectively), deposits maturity structure, concentration risk, mismatch ratios, loan-to-deposit ratio and liquidity profile of the investment portfolio.

The Group funds its operations principally by accepting deposits from retail and corporate depositors. In addition, the Group may issue certificates of deposit to secure long-term funds. Funding may also be secured through adjusting the asset mix in the Group's investment portfolio. The Group uses the majority of funds raised to extend loans, to purchase debt securities or to conduct interbank placements.

### Operational Risk Management

Operational risk is the risk of loss resulting from inadequate or failed internal processes, people and systems, or from external events. The risk is inherent in every aspect of business operations and confronted by the Bank in its day to day operational activities.

The Group has put in place an effective internal control process which requires the establishment of detailed policies and control procedures for all the key activities. Proper segregation of duties and authorisation is the fundamental principle followed by the Group. Corporate-level policy and procedure on operational risk management are formulated by RMD and approved by RC.

The Group has adopted the "Three Lines of Defence" model for its operational risk management framework: individual business units are the first line of defence, responsible for managing and reporting operational risks specific to their business units by applying the respective tools such as key risk indicators, self assessment and operational risk events reporting mechanism to identify, assess and control the risks inherent in their business processes, activities and products. RMD together with certain operational risk related functions within the Bank are the second line of defence. In addition to formulating the operational risk management policy and procedure, RMD is also responsible for developing and introducing operational risk management tools, monitoring the performance and result of operational risk management in



various units, assessing operational risk profile, recording operational risk data and reporting operational risk events to RC and senior management in order to assist the overall management of operational risk of the Group. Certain functional departments including the Human Resources Department, Informational Technology Department, Legal & Compliance Department, Corporate Services Department, Financial Management Department and General Accounting & Accounting Policy Department, are required to carry out the corporate-level operational risk management for the risk areas that are under their functional responsibilities and to provide other units with professional advice/training in respect of certain operational risk categories. The Audit Department is the third line of defence, responsible for conducting independent audit of the operational risk management activities regarding their compliance and effectiveness.

The Group also takes out insurance to mitigate unforeseeable operational risks. Business continuity plans are in place 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 regarding 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 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. The system entails continuous monitoring of external reputation risk incidents and published failures of risk incidents in the financial industry.

The Lehman Brothers Minibonds incident has had an adverse impact on the Group's reputation as there have been alleged cases of mis-selling. The Group is handling customer complaints cautiously so as to minimise the reputation risk.

#### **Legal and Compliance Risk Management**

Legal risk is the risk that unenforceable contracts, lawsuits or adverse judgments may disrupt or otherwise negatively affect the operation or financial condition of the Group. Compliance risk is the risk of legal or regulatory sanctions, financial loss, or loss to 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 Legal and Compliance Department headed by a General Manager who reports to the Chief Risk Officer.

#### **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 of Directors 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 capital management is to maximise shareholders' total return while maintaining a capital adequacy position commensurate with the Group's overall risk profile. The Group periodically reviews its capital structure and adjusts the capital mix where appropriate to achieve the targeted weighted average cost of capital. ALCO monitors the Group's capital adequacy position. The Group has complied with all the statutory capital standards for all the periods.

To comply with HKMA's requirements as stated in the Supervisory Policy Manual "Supervisory Review Process", the Group has implemented its internal capital adequacy assessment process (ICAAP). Using the statutory minimum capital adequacy ratio (CAR), 8%, as a starting point, extra capital (capital add-on) needed to cover the risks not captured under Pillar I is assessed. Scorecard methodology has been used to evaluate the Group's risk profile in order to assess the capital add-on and determine the minimum CAR. An Operating CAR Range has also been established which incorporates the need for future business growth and efficiency of capital utilisation.



### Stress Testing

The Group supplements the analysis of various types of risks with stress testing. Stress testing is a risk management tool for estimating the Group's risk exposures under stressed conditions arising from extreme but plausible market or macroeconomic movements. These tests are conducted on a regular basis by various risk management units and ALCO monitors the results against limits approved by RC. The Financial Management Department reports the combined stress test results to the Board and RC regularly.

### BOC Life Insurance

The principal activity of BOC Life's business 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, market risk and credit risk. BOC Life manages these risks independently and reports to its RC on a regular basis. The key risks of its insurance business and related risk control processes 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. BOC Life manages these risks through the application of its 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.

Within the insurance process, concentrations of risk may arise where a particular event or series of events could impact heavily upon BOC Life's liabilities. Such concentrations may arise from a single insurance contract or through a small number of related contracts, and relate to circumstances where significant liabilities could arise.

For in-force insurance contracts, most of the underlying insurance liabilities are related to endowment and unit-linked insurance products. For most of the insurance policies issued, BOC Life has a retention limit on any single life insured. BOC Life cedes the excess of the insured benefit over the limit for standard risks (from a medical point of view) to the reinsurer under an excess of loss reinsurance arrangement.

Uncertainty in the estimation of future benefit payments and premium receipts for long-term insurance contracts arises from the unpredictability of long-term changes in overall levels of mortality and persistency. In order to assess the uncertainty due to the mortality assumption and lapse assumption, BOC Life conducts mortality study and lapse study in order to determine the appropriate assumptions. In these studies, consistent results are reflected in both assumptions with appropriate margins.

#### Market Risk Management

##### (i) *Interest Rate Risk Management*

An increase in interest rates may result in the depreciation of the value of the bond portfolio. It may also result in customers accelerating surrenders. A decrease in interest rates may result in 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.

##### (ii) *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 cashflow 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.

*(iii) 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 it has 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)
- Reinsurers' 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 credit risk management, BOC Life has strengthened its communication with the ALMD of the Group and closely monitors and updates the established Disposal and Watch Lists to ensure consistency with the Group's credit risk management and investment strategy.