# 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.

#### **CONSOLIDATED FINANCIAL REVIEW**

In the first six months of 2008, the Group made good progress in executing its strategies and achieved solid growth in its core earnings in a challenging environment. Driven by the growth in net interest income, net fees and commission income as well as net trading income, operating profit before impairment allowances

increased by HK\$1,309 million, or 15.1%, year-on-year to HK\$9,951 million. However, owing to an impairment charge on securities investments and a net charge of loan impairment allowances, the Group's profit attributable to shareholders decreased by HK\$378 million, or 5.1%, to HK\$7,088 million. Earnings per share were HK\$0.6704, down HK\$0.0358. Return on average total assets ("ROA") and return on average shareholders' funds ("ROE") were 1.32% and 15.09% respectively. ROA and ROE before impairment allowances improved by 0.05 percentage point and 1.13 percentage points to 1.83% and 21.18% respectively.

# Financial Highlights

	Half-year ended	Half-year ended	Half-year ended
	30 June	31 December	30 June
HK\$'m, except percentage amounts	2008	2007	2007
Operating income	14,039	15,194	12,060
Operating expenses	(4,088)	(4,355)	(3,418)
Operating profit before impairment allowances	9,951	10,839	8,642
Net (charge)/reversal of impairment allowances	(2,227)	(1,614)	166
Others	710	674	419
Profit before taxation	8,434	9,899	9,227
Profit attributable to equity holders of the Company	7,088	7,980	7,466
Earnings per share (HK\$)	0.6704	0.7547	0.7062
Return on average total assets	1.32%	1.50%	1.57%
Return on average shareholders' funds*	15.09%	17.68%	17.32%
Return on average total assets before			
impairment allowances	1.83%	1.98%	1.78%
Return on average shareholders' funds before			
impairment allowances*	21.18%	24.01%	20.05%
Net interest margin (NIM)	2.03%	2.10%	2.03%
Adjusted NIM**	2.10%	2.12%	2.07%
Non-interest income ratio	28.56%	30.95%	26.18%
Cost-to-income ratio	29.12%	28.66%	28.34%

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

<sup>\*\*</sup> Adjusting for the estimated impact of BOCHK's RMB clearing function.

Since December 2003, the Bank has been the clearing bank to provide RMB clearing services for banks in Hong Kong that operate RMB business. Acting as the clearing bank, the Bank deposits with the People's Bank of China ("PBOC") those RMB deposits taken in Hong Kong by the participating banks. At the same time, the Group earns an interest spread between the RMB funds taken from participating banks and those placed with the PBOC. As RMB deposits grow, the impact on the Group's average interest-earning assets and net interest

margin ("NIM") becomes more material. It is, therefore, considered necessary to also provide information on NIM before incorporating the estimated impact of RMB clearing services (hereafter called "Adjusted net interest margin"). Adjusted net interest margin was 2.10% in the first half of 2008.

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

# Net Interest Income and Margin

HK\$'m, except percentage amounts	Half-year ended	Half-year ended	Half-year ended
	30 June	31 December	30 June
	2008	2007	2007
Interest income	18,105	24,572	21,484
Interest expense	(8,076)	(14,080)	(12,581)
Net interest income	10,029	10,492	8,903
Average interest-earning assets  Net interest spread	988,746	992,821	883,030
	1.79%	1.68%	1.61%
Net interest margin	2.03%	2.10%	2.03%
Adjusting for the estimated impact of BOCHK's  RMB clearing function  Adjusted net interest margin	2.10%	2.12%	2.07%

Net interest income increased by HK\$1,126 million or 12.6% year-on-year to HK\$10,029 million. Net interest margin remained flat at 2.03% as the rise in net interest spread was offset by the decline of the contribution from net free fund due to the fall in market interest rates. The increase in RMB deposits from participating banks also contributed to the flat net interest margin. Should the estimated impact of BOCHK's RMB clearing function in Hong Kong be excluded, adjusted net interest margin, however, would have increased by 3 basis points to 2.10%.

Market interest rates in the first half of 2008 were lower than those in the same period in 2007. Compared to the first half of 2007, average one-month HIBOR fell by 226 basis points to 1.98% while average one-month LIBOR declined by 237 basis points to 2.95%. The Group's average HKD Prime rate decreased by 213 basis points

year-on-year to 5.62%, thus widening the HKD Prime-to-one-month HIBOR spread (hereafter called "Prime-HIBOR spread") by 13 basis points to 3.64%.

The improvement in net interest income was mainly driven by the growth in average interest-earning assets of HK\$105,716 million, or 12.0%, which was primarily driven by the increase in average customer deposits. The widening of net interest spread underpinned by improved securities spread also contributed to the growth in net interest income; however, it was held back by the decline in the contribution from net free fund. Loan spread was compressed although the average pricing of new corporate loan facilities during this period had improved with the tightened credit environment. Meanwhile, higher yielding loans, including Mainland lending, trade finance and SME loans continued to grow. Total deposit spread decreased amid lower market rates.

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

	Half-year ended 30 June 2008		Half-year ended 31 December 2007		Half-year ended 30 June 2007	
	Average	Average	Average	Average Average		Average
ASSETS	balance HK\$'m	yield %	balance HK\$'m	yield %	balance HK\$'m	yield %
Cash, balances and placements with banks						
and other financial institutions	213,538	2.53	242,913	4.15	171,408	3.80
Debt securities investments	312,522	4.49	332,810	4.99	330,010	4.84
Loans and advances to customers	447,133	3.68	400,028	5.39	363,753	5.51
Other interest-earning assets	15,553	2.82	17,070	2.90	17,859	4.53
Total interest-earning assets	988,746	3.67	992,821	4.91	883,030	4.91
Non interest-earning assets	101,572		100,579		87,716	
Total assets	1,090,318	3.33	1,093,400	4.46	970,746	4.46

	Half-year ended 30 June 2008		Half-year ended 31 December 2007		Half-year ended 30 June 2007	
	Average	Average Average		Average	Average	Average
	balance	rate	balance	rate	balance	rate
LIABILITIES	HK\$'m	%	HK\$'m	%	HK\$'m	%
Deposits and balances of banks and						
other financial institutions	70,561	2.04	48,224	3.45	43,374	3.31
Current, savings and fixed deposits	758,195	1.85	787,418	3.24	696,136	3.30
Certificates of deposit issued	1,905	2.81	2,062	3.62	2,473	3.54
Other interest-bearing liabilities	30,112	2.23	27,627	2.54	26,743	3.31
Total interest-bearing liabilities	860,773	1.88	865,331	3.23	768,726	3.30
Non interest-bearing deposits	41,542		40,495		33,178	
Shareholders' funds* and						
non interest-bearing liabilities	188,003		187,574		168,842	
Total liabilities	1,090,318	1.49	1,093,400	2.55	970,746	2.61

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

Compared to the second half of 2007, net interest income fell by HK\$463 million, or 4.4%. Average interest-earning assets decreased by HK\$4,075 million, or 0.4%, mainly due to the decline in funds from IPO subscription as IPO activities subsided in the first half of 2008. Net interest margin fell by 7 basis points as the increase of 11 basis points in net interest spread was offset by the decline of

18 basis points in contribution from net free funds. The increase in RMB deposits from participating banks also contributed to the decline in net interest margin. Should the estimated impact of BOCHK's RMB clearing function in Hong Kong be excluded, adjusted net interest margin would have decreased by only 2 basis points to 2.10%.

Compared to the second half of 2007, average one-month LIBOR fell by 223 basis points to 2.95% while average 1-month HIBOR decreased by 235 basis points to 1.98%. The Group's average HKD Prime rate decreased by 182 basis points, thus widening the Prime-HIBOR spread by 53 basis points. The decrease in net interest income was mainly attributable to the decline in contribution of net free funds due to fall in market interest rates. Meanwhile,

securities spread improved as the funding cost declined. Higher yielding loans, including Mainland lending, trade finance and SME loans, continued to grow. Loan spread also rose as Prime-HIBOR spread widened. Total deposit spread was compressed, mainly due to the decrease in market rates outpaced the drop in the Group's average deposit rate.

#### **Net Fees and Commission Income**

HK\$'m	Half-year ended 30 June 2008	Half-year ended 31 December 2007	Half-year ended 30 June 2007
Bills commissions	329	315	273
Loan commissions	263	218	129
Investment and insurance fee income	1,743	2,747	1,764
Securities brokerage (Stockbroking)	1,289	2,236	1,324
Securities brokerage (Bonds)	220	146	65
Sale of funds	157	341	342
Life insurance*	77	24	33
General insurance	55	44	52
Trust services	87	87	66
Payment services	239	243	221
Credit cards	578	556	471
Account services	146	137	153
Guarantees	26	8	24
Currency exchange	108	111	73
RMB business	99	83	54
Correspondent banking	21	20	17
IPO-related business	30	62	43
Others	121	107	99
Fees and commission income	3,845	4,738	3,439
Fees and commission expenses	(946)	(1,096)	(807)
Net fees and commission income	2,899	3,642	2,632

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

#### MANAGEMENT'S DISCUSSION AND ANALYSIS

Net fees and commission income rose by HK\$267 million or 10.1% year-on-year to HK\$2.899 million. Fee income from loan business grew significantly by HK\$134 million or 103.9% as a result of the enlargement of the Group's loan portfolio. This was mainly attributed to the successful implementation of the Group's new business model as well as the increase in business following the appointment of the Group as the "Asia-Pacific Syndicated Loan Centre" of the BOC Group early this year. Fees from the card business also showed satisfactory growth of HK\$107 million or 22.7% as cardholder spending and merchant acquiring volume were up 17.2% and 23.2% respectively. Fee income from RMB-related business, currency exchange, trust services and bills services all recorded double-digit growth of 83.3%, 47.9%, 31.8% and 20.5% respectively. The Group's custody business also contributed to the growth in fees and commission income. The change in investment sentiments in the stock market, however, had a negative impact on the fee income from investmentrelated agency businesses. Stock broking fee income declined by HK\$35 million or 2.6% while fee income

from sale of funds decreased by HK\$185 million or 54.1%. These were partly offset by the increase in fee income from the distribution of bonds by HK\$155 million or 238.5%. Meanwhile, fees and commission expenses increased by HK\$139 million or 17.2%, which was in line with the growth in transaction volume. Major increases in fees and commission expenses came from credit card service, RMB-related business and currency exchange.

Compared to the second half of 2007, net fees and commission income decreased by HK\$743 million or 20.4% largely because of the decreases in fee income from stock broking of HK\$947 million or 42.4% and sale of funds of HK\$184 million or 54.0% as business volumes declined. Meanwhile, fees and commission income from loan services, general insurance, RMB-related business and card business increased by 20.6%, 25.0%, 19.3% and 4.0% respectively. Fees and commission expenses were down 13.7%, mainly due to the decrease in stock broking expenses.

#### Investment and Insurance Business

HK\$'m	Half-year ended 30 June 2008	Half-year ended 31 December 2007	Half-year ended 30 June 2007
Investment and insurance fee income Securities brokerage (Stockbroking)	1,289	2,236	1,324
Securities brokerage (Bonds)	220	146	65
Sale of funds	157	341	342
Life insurance*	77	24	33
	1,743	2,747	1,764
Insurance and investment income of BOC Life	1,7 13	_,, .,	.,, .
Net insurance premium income	4,501	5,493	2,933
Interest income	538	442	346
Net (loss)/gain on financial instruments			
designated at fair value through profit or loss	(1,392)	1,282	(389)
Others	8	10	5
Gross insurance and investment income			
of BOC Life#	3,655	7,227	2,895
Less: net insurance benefits and claims	(3,602)	(6,808)	(2,632)
	53	419	263
Total investment and insurance income	1,796	3,166	2,027
Of which: Life insurance fee income*	77	24	33
Insurance income of BOC Life#	53	419	263
Total life insurance income	130	443	296
Investment fee income	1,666	2,723	1,731
Total investment and insurance income	1,796	3,166	2,027

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

Total investment and insurance income decreased by HK\$231 million, or 11.4%, year-on-year to HK\$1,796 million. Investment and insurance fee income decreased marginally by HK\$21 million or 1.2% while BOC Life's insurance income was down HK\$210 million, or 79.8%. The decline in investment and insurance fee income was mainly caused by lower contribution from the sales of funds and stock broking, which was, however, substantially offset by the growth in the sales of bonds and life insurance. Income from the sale of funds decreased by HK\$185 million or 54.1% as the sales of open-end funds dropped by 64.8% in the sluggish market. In particular, the sales of China equity funds and certain thematic funds declined substantially as the equity market retreated in

the first half of 2008. Commission from stock broking was down HK\$35 million or 2.6% as retail customers, who make up the majority of the Group's customer portfolio, became less active in trading in a volatile stock market. Meanwhile, commission from the sales of bonds increased significantly by HK\$155 million, or 238.5%, as the Group successfully expanded its offerings of structured products and enhanced its private placement services to meet customer needs, which boosted the sales of structured notes by a hefty 200.2%. Fee income from the Group's insurance business partner also rose strongly by HK\$44 million, or 133.3% on the back of the 83.1% increase in sales volume. As for BOC Life, despite the investment loss due to the decline in market value, BOC

<sup>#</sup> Before commission expenses.

Life recorded robust growth in premium income as net insurance premium income rose by 53.5% while interest income grew by 55.5%. However, insurance income of BOC Life dropped by HK\$210 million or 79.8% to HK\$53 million, mainly due to the increase in net loss on financial instruments designated at fair value through profit or loss caused by the marked-to-market loss of its debt securities and equity investments as well as the new business strain generated. Together with the contribution of the HK\$77 million fee income from the Group's insurance business partner, total life insurance income was HK\$130 million, down HK\$166 million or 56.1%.

Compared to the second half of 2007, total investment and insurance income decreased by HK\$1,370 million, or 43.3%, mainly as a result of the decrease in investment and insurance fee income of HK\$1,004 million or 36.5% as commission income from stock broking and sale of funds declined by 42.4% and 54.0% respectively. The insurance income of BOC Life was down HK\$366 million or 87.4% mainly due to the marked-to-market loss of its investment portfolio in the first half of 2008 whereas a capital gain from its equity investments was recorded in the second half of 2007.

# **Net Trading Income**

	Half-year ended	Half-year ended	Half-year ended
	30 June	31 December	30 June
HK\$'m	2008	2007	2007
Foreign exchange and foreign exchange products	875	645	155
Interest rate instruments	206	(162)	192
Equity instruments	135	111	70
Commodities	21	2	_
Net trading income	1,237	596	417

Net trading income was HK\$1,237 million, up HK\$820 million or 196.6% year-on-year mainly due to the surge in net trading income from foreign exchange and foreign exchange products by HK\$720 million or 464.5% as marked-to-market loss on foreign exchange swap contracts\* was significantly lower by HK\$346 million and income from other foreign exchange activities rose by HK\$477 million or 90.7%. The growth of income from other foreign exchange activities was mainly driven by the higher business volume of foreign exchange and structured deposits. The increase were partially offset by a foreign exchange loss arising from the revaluation of Nanyang Commercial Bank (China), Limited's ("Nanyang (China)") Hong Kong Dollar capital funds against the appreciated RMB during the course of approval for conversion into RMB. Net trading income from interest rate instruments rose by HK\$14 million or 7.3%. Net trading income of equity instruments increased by HK\$65 million or 92.9%, which was mainly attributable to the option premium income from the newly launched "Equity-Linked Investments" as well as the increase in the fair value of equity warrants issued by the Group. Net trading income from commodities increased by HK\$21 million because of higher customer demand for bullion products in the then prevailing investment environment.

Compared to the second half of 2007, net trading income rose by HK\$641 million or 107.6%. The increase was mainly attributable to the increase in the fair value of interest rate swap contracts and the growth in income from foreign exchange transactions and structured deposits.

<sup>\*</sup> Foreign exchange swap contracts are usually used for the Group's liquidity management and funding activities. Under 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 2008	Half-year ended 31 December 2007	Half-year ended 30 June 2007
	2006	2007	2007
Net (loss)/gain on financial instruments designated at FVTPL of the banking business	(92)	(20)	(5)
Net (loss)/gain on financial instruments designated at FVTPL of BOC Life	(1,392)	1,282	(389)
Net (loss)/gain on financial instruments designated at FVTPL	(1,484)	1,262	(394)

Net loss on financial instruments designated at fair value through profit or loss rose by HK\$1,090 million or 276.6% year-on-year. This was mainly due to the increase in marked-to-market loss on both debt securities and equity investments held by BOC Life.

Compared to the net gain of HK\$1,262 million recorded in the second half of 2007, net loss on financial instruments designated at fair value through profit or loss in the first half of 2008 was HK\$1,484 million. The decline of HK\$2,746 million was mainly due to the marked-to-market loss of debt securities investments of BOC Life recorded in the first half of 2008 whereas a capital gain from the equity investments and a marked-to-market gain of debt securities investments of BOC life were recorded in the second half of last year.

# Net Insurance Premium Income

	Half-year ended 30 June	Half-year ended 31 December	Half-year ended 30 June
HK\$'m	2008	2007	2007
Life and Annuity	4,195	4,237	2,358
Linked Long Term	316	1,262	578
Retirement Scheme	_	-	_
	4,511	5,499	2,936
Reinsurers' share of gross earned premiums	(10)	(6)	(3)
Net insurance premium income	4,501	5,493	2,933

Net insurance premium income surged by HK\$1,568 million, or 53.5%, to HK\$4,501 million, mainly driven by the increase in premium income from single premium products. In the first half of the year, the Group stepped up its marketing efforts by introducing a host of promotional activities and improving its multi-channel marketing platform. As a result, net insurance premium income from single and regular premium products were up 56.5% and 31.7% respectively.

Compared to the second half of 2007, net insurance premium income dropped by HK\$992 million or 18.1%. The decrease was mainly attributable to the decline in premium income from investment-linked products as the market became less active in the first half of 2008. On the other hand, net insurance premium income from regular premium products was up 6.8%.

#### Net Insurance Benefits and Claims

HK\$'m	Half-year ended	Half-year ended	Half-year ended
	30 June	31 December	30 June
	2008	2007	2007
Life and Annuity	3,601	5,443	2,084
Linked Long Term	1	1,364	551
Retirement Scheme	1	4	(2)
Reinsurers' share of claims, benefits and surrenders paid  Net insurance benefits and claims	3,603	6,811	2,633
	(1)	(3)	(1)
	3,602	6,808	2,632

Net insurance benefits and claims increased by HK\$970 million, or 36.9%, to HK\$3,602 million, primarily due to the growth of net insurance premium income. Prospective liabilities were recognised on the basis of the assumptions made as to mortality, investment income and fair value changes in the underlying investments.

Compared to the second half of 2007, net insurance benefits and claims dropped by HK\$3,206 million or 47.1%, resulting mainly from the decrease in business volume and change in market interest rates.

# **Operating Expenses**

HK\$'m, except percentage amounts	Half-year ended	Half-year ended	Half-year ended
	30 June	31 December	30 June
	2008	2007	2007
Staff costs Premises and equipment expenses	2,482	2,547	2,109
(excluding depreciation)  Depreciation on owned fixed assets  Other operating expenses	495	541	417
	480	414	373
	631	853	519
Operating expenses  Cost-to-income ratio	4,088	4,355	3,418
	29.12%	28.66%	28.34%

Total operating expenses were up HK\$670 million, or 19.6%, year-on-year to HK\$4,088 million, which was broadly in line with overall business growth. Staff costs rose by HK\$373 million primarily due to pay rise and the recruitment of new staff for business expansion. Compared to end-June 2007, headcount measured in full-time equivalents rose by 750 to 13,616 at end-June 2008.

Premises and equipment expenses increased by HK\$78 million or 18.7% mainly because of higher rental and IT costs.

Depreciation on owned fixed assets rose by HK\$107 million, or 28.7%, to HK\$480 million due to the increase

of computer equipment as the Group continued with infrastructure improvement coupled with the appreciation of the value of bank premises.

Other operating expenses were up HK\$112 million, or 21.6%, mainly due to the rise in operating expenses as business volume increased, higher business tax due to increased businesses in the Mainland as well as the rise in promotional expenses and donations.

Compared to the second half of 2007, total operating expenses fell by HK\$267 million, or 6.1%, mainly due to the decline in promotional expenses and certain business expenses following the drop in business volume.

Net (Charge)/Reversal of Loan Impairment Allowances

HK\$'m	Half-year ended 30 June 2008	Half-year ended 31 December 2007	Half-year ended 30 June 2007
Net (Charge)/Reversal of loan impairment allowances	2000	2007	2007
Individual assessment			
– new allowances	(142)	(224)	(106)
– releases	62	190	109
– recoveries	187	971	340
Collective assessment			
– new allowances	(199)	(433)	(192)
– releases	7	_	_
– recoveries	14	15	15
Net (charge)/credit to Income Statement	(71)	519	166

In the first half of 2008, the Group recorded a net charge of loan impairment allowances of HK\$71 million. Compared to a net credit of HK\$166 million in the first half of 2007, the increase in net charge of loan impairment allowances was mainly due to the decline in loan recoveries and the increase in net charge of allowances (before recoveries) from individual assessment.

Net loan impairment charge from individual assessment (before recoveries) was HK\$80 million, compared to the net release of HK\$3 million recorded in the first half of 2007. The increase in net impairment charge (before recoveries) was caused by the increase in new allowances as they were made to cover the formation of new impaired loans and further deterioration of existing impaired accounts. Reduction of release of allowances due to significant improvement in loan quality during past years also contributed to the increase in the net impairment charge.

Net charge of collective impairment allowances (before recoveries) remained flat year-on-year at HK\$192 million. New impairment allowances were made as the Group's loan portfolio further expanded.

The Group continued to make recoveries of loans that were previously written off. Total recoveries in individual and collective assessment amounted to HK\$201 million, down HK\$154 million compared to the first half of 2007.

Compared to a net release of loan impairment allowances recorded in the second half of last year which was mainly attributable to the recoveries of certain large accounts, the Group registered a net charge of loan impairment allowances in the first half of 2008.

Net Cha	arge of I	mnairment	Allowances	on S	Securities	Investments
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	Half-year ended	Half-year ended	Half-year ended
	30 June	31 December	30 June
HK\$'m	2008	2007	2007
Held-to-maturity securities	(962)	(1,844)	_
Available-for-sale securities	(1,187)	(289)	_
Net charge of impairment allowances on			
securities investments	(2,149)	(2,133)	_

In the first half of 2008, further deterioration of the capital market had an impact on the Group's securities investment in the US and hence the related provisions. The Group carried out a comprehensive assessment on its impairment charges, taking into account the relevant criteria and other specific features of the investments, and increased its provisions accordingly. As a result, the Group recorded HK\$2,149 million of net charge of impairment allowances for its portfolio of US mortgage-backed securities, which comprised HK\$420 million net write-back

for the US subprime mortgage-backed securities, a net charge of HK\$655 million for Alt-A and HK\$1,914 million for Prime residential mortgage-backed securities. For details about the composition of the Group's investment securities portfolio, and the impairment and provisioning policies on investment, please refer to Note 24, Note 1 and Note 2 to the Interim Financial Information.

Compared to the second half of 2007, net charge of impairment allowances rose by HK\$16 million or 0.8%.

# **Property Revaluation**

	Half-year ended 30 June	Half-year ended 31 December	Half-year ended 30 June
HK\$'m	2008	2007	2007
Net (loss)/gain on revaluation of premises	(8)	12	7
Net gain on fair value adjustments on investment properties	701	642	414
Deferred tax  Net gain on fair value adjustments on	(53)	(84)	(59)
investment properties, after tax	648	558	355

The aggregate impact of property revaluation before tax on the income statement for the first half of 2008 was HK\$693 million, of which a net gain of HK\$701 million came from the revaluation of investment properties, partially offset by a net loss of HK\$8 million from the revaluation of premises. The related deferred tax charge on revaluation of investment properties amounted to HK\$53 million. As a result, the net impact of fair value

adjustments on investment properties after tax in the first half of 2008 was HK\$648 million. The net gain on property revaluation was in line with the increase in property prices in the first half of 2008.

Compared to the second half of 2007, net gain from revaluation of investment properties after tax increased by HK\$90 million or 16.1%.

# Financial Position

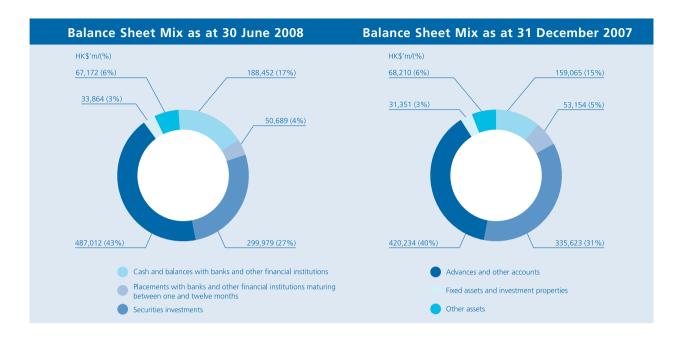
HK\$'m, except percentage amounts	At 30 June 2008	At 31 December 2007
Cash and balances with banks and other financial institutions	188,452	159,065
Placements with banks and other financial institutions maturing		
between one and twelve months	50,689	53,154
Hong Kong SAR Government certificates of indebtedness	32,430	32,770
Securities investments <sup>1</sup>	299,979	335,623
Advances and other accounts	487,012	420,234
Fixed assets and investment properties	33,864	31,351
Other assets <sup>2</sup>	34,742	35,440
Total assets	1,127,168	1,067,637
Hong Kong SAR currency notes in circulation	32,430	32,770
Deposits and balances of banks and other financial institutions	81,625	60,599
Deposits from customers	819,110	793,606
Debt securities in issue at amortised cost <sup>3</sup>	2,756	2,089
Insurance contract liabilities	25,070	22,497
Other accounts and provisions	60,508	61,018
Subordinated liabilities <sup>4</sup>	8,150	-
Total liabilities	1,029,649	972,579
Minority interests	2,472	2,216
Capital and reserves attributable to the equity holders of the Company	95,047	92,842
Total liabilities and equity	1,127,168	1,067,637
Loan-to-deposit ratio	57.81%	51.66%

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

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

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

<sup>&</sup>lt;sup>4</sup> Subordinated liabilities represents the subordinated loan granted by the Group's parent bank, Bank of China Limited.



The Group's total assets were HK\$1,127,168 million as at 30 June 2008, up HK\$59,531 million or 5.6% from the end of 2007. Key changes include:

- Cash and balances with banks and other financial institutions increased by HK\$29,387 million, or 18.5%, mainly due to the increase in RMB deposits from participating banks placed with the PBOC.
- Advances and other accounts increased by HK\$66,778 million, or 15.9%, primarily due to the growth of advances to customers by HK\$62,525 million or 15.1%.
- Securities investments decreased by HK\$35,644 million or 10.6% as funds were redeployed into advances to customers. As of 30 June 2008, the Group's exposure in US subprime mortgage-backed securities dropped to HK\$1.2 billion from HK\$4.1 billion as of end-2007.

# **Advances to Customers**

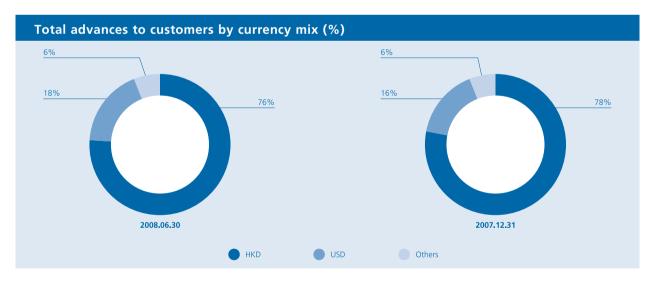
HK\$'m, except percentage amounts	At 30 June 2008	%	At 31 December 2007	%
Loans for use in Hong Kong	342,227	72.0	305,677	74.0
Industrial, commercial and financial	194,423	40.9	168,656	40.8
Individuals	147,804	31.1	137,021	33.2
Trade finance	31,683	6.7	24,275	5.9
Loans for use outside Hong Kong	101,677	21.3	83,110	20.1
Total advances to customers	475,587	100.0	413,062	100.0

Riding on the growth momentum built up last year, total advances to customers grew strongly by HK\$62,525 million or 15.1% to HK\$475,587 million. The growth was broad-based, covering both corporate and individual loans, and should be attributed to the effective implementation of the Group's business strategies under its new business model. The Bank's appointment as the "Asia-Pacific Syndicated Loan Centre" of the BOC Group early this year also helped grow its syndication lending.

Loans for use in Hong Kong grew by 12.0%.

- Lending to the industrial, commercial and financial sectors increased by HK\$25,767 million, or 15.3%, to HK\$194,423 million, driven by the growth in loans for property investment, property development, information technology, manufacturing as well as the wholesale and retail trade.
- Residential mortgage loans (excluding those under the government-sponsored Home Ownership Scheme) was up HK\$9,565 million, or 9.0%, to HK\$116,148 million as a result of the Group's effective product innovation and marketing efforts.
- Card advances was down HK\$95 million, or 1.6%, to HK\$5,666 million.
- Other consumer lending increased by HK\$1,153 million, or 10.8%, to HK\$11,861 million mainly due to the growth in personal loans.

Trade finance surged by HK\$7,408 million, or 30.5%, as a result of the Group's promotional efforts, improved business model together with the robust import and export trade. Meanwhile, loans for use outside Hong Kong also grew strongly by HK\$18,567 million or 22.3%. The increase was mainly driven by overseas lending and loan growth of the Group's Mainland operation.

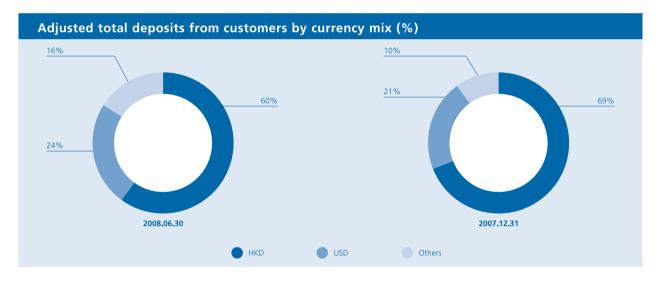


In terms of currency mix, HKD and USD advances to customers accounted for 75.7% and 18.3% respectively of the total at the end of June 2008 while advances to customers in RMB and other currencies accounted for 3.6% and 2.4% respectively. The proportion of USD advances to customers rose by 2.7% while HKD advances to customers declined by 2.7%. There was no significant change in other currency mix in the first half of 2008.

# **Deposits from Customers**

HK\$'m, except percentage amounts	At 30 June 2008	%	At 31 December 2007	%
Demand deposits and current accounts Savings deposits Time, call and notice deposits	40,907	5.0	40,499	5.1
	295,502	35.9	286,653	35.9
	482,701	58.7	466,454	58.3
Total deposits from customers Structured deposits Adjusted total deposits from customers	819,110	99.6	793,606	99.3
	3,601	0.4	5,959	0.7
	822,711	100.0	799,565	100.0

Total deposits from customers increased by HK\$25,504 million, or 3.2%, to HK\$819,110 million. Demand deposits and current accounts rose by HK\$408 million or 1.0%. Savings deposits increased by HK\$8,849 million or 3.1%. Time, call and notice deposits were up HK\$16,247 million or 3.5%. Structured deposits, a hybrid of retail deposit and derivatives offering a higher nominal interest rate, decreased by HK\$2,358 million, or 39.6% as customers chose to switch their funds to other investment instruments under the volatile investment environment. The Group's loan-to-deposit ratio was up 6.15 percentage points to 57.81% at the end of June 2008 as total loan growth outpaced deposits growth.



In terms of currency mix, HKD and USD deposits accounted for 60.3% and 23.8% respectively at the end of June 2008, while deposits in RMB and other currencies accounted for 5.1% and 10.8% respectively. The proportion of HKD deposits dropped by 8.8 percentage points while that of RMB and other currency deposits rose by 2.9 percentage points and 3.1 percentage points respectively from the end of 2007, reflecting customers' preferences for shifting their funds into RMB deposits in anticipation of the appreciation in the value of RMB and into other foreign currency deposits for higher returns. The proportion of USD deposits also rose by 2.8%. The Group's HKD loan-to-deposit ratio was 72.6%, up from 58.7% at end-2007 as HKD loans increased while HKD deposits decreased.

# Loan Quality

HK\$'m, except percentage amounts	At 30 June 2008	At 31 December
Advances to customers	475,587	413,062
Classified or impaired loan ratio <sup>&amp;</sup>	0.34%	0.44%
Impairment allowances	1,524	1,385
Impairment allowances	1	·
Regulatory reserve for general banking risks	4,620	4,130
Total allowances and regulatory reserve	6,144	5,515
Total allowances as a percentage of advances to customers	0.32%	0.34%
Total allowances and regulatory reserve as a percentage of		
advances to customers	1.29%	1.34%
Impairment allowances on classified or impaired loan ratio##	27.50%	22.52%
Residential mortgage loans* – delinquency and rescheduled loan ratio**	0.08%	0.15%
Card advances – delinquency ratio**#	0.30%	0.28%

	Half-year ended	Half-year ended
	30 June	30 June
	2008	2007
Card advances – charge-off ratio#	2.14%	2.59%

<sup>&</sup>lt;sup>8</sup> 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.

The Group's loan quality continued to improve with the classified or impaired loan ratio falling to a historical low of 0.34%, against 0.44% at end-2007. Classified loans decreased by approximately HK\$0.2 billion or 10.8% to HK\$1.6 billion. New classified loans remained at a low level, representing less than 0.1% of total loans outstanding.

Total impairment allowances, including both individual assessment and collective assessment, amounted to HK\$1,524 million. Impairment allowances on classified or impaired loan ratio were 27.50%. The Group's regulatory reserve rose by HK\$490 million to HK\$4,620 million as advances to customers increased.

The quality of the Group's residential mortgage loans continued to improve with the combined delinquency and rescheduled loan ratio falling by 0.07 percentage point to 0.08% at the end of June 2008. The quality of card advances remained sound, with the charge-off ratio standing at 2.14% in the first half of 2008. Both ratios were well below the market average.

<sup>\*</sup> Residential mortgage loans exclude those under the Home Ownership Scheme and other government-sponsored home purchasing schemes.

<sup>\*\*</sup> Delinquency ratio is measured by a ratio of total amount of overdue loans (more than three months) to total outstanding loans.

<sup>\*</sup> Excluding Great Wall cards and computed according to the HKMA's definition.

<sup>&</sup>quot;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.

# **Capital and Liquidity Ratios**

HK\$'m, except percentage amounts	At 30 June 2008	At 31 December 2007
Core capital	67,155	67,145
Deductions	(274)	(483)
Core capital after deductions	66,881	66,662
Supplementary capital	14,032	5,161
Deductions	(274)	(483)
Supplementary capital after deductions	13,758	4,678
Total capital base after deductions	80,639	71,340
Risk-weighted assets		
Credit risk	547,432	510,970
Market risk	6,299	7,998
Operational risk	42,631	39,139
Deductions	(15,085)	(12,875)
Total risk-weighted assets	581,277	545,232
Capital adequacy ratios (banking group level)		
Core capital ratio	11.51%	12.23%
Capital adequacy ratio	13.87%	13.08%

	Half-year ended	Half-year ended
	30 June	30 June
	2008	2007
Average liquidity ratio	42.47%	50.08%

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

Consolidated capital adequacy ratio of the banking group at 30 June 2008 was 13.87%, up 0.79 percentage point from end-2007 due to the increase in total capital base. Total capital base rose by 13.0% to HK\$80,639 million mainly due to a subordinated loan of EURO 660 million (approximately HK\$8.15 billion) obtained by the Group from its parent bank, Bank of China Limited, on 27 June 2008. This subordinated loan meets the conditions laid down in the Banking (Capital) Rules

and has been included as supplementary capital for the purpose of determining the capital base of the banking group. Meanwhile, risk-weighted assets rose by 6.6% to HK\$581,277 million, mainly driven by significant growth in advances to customers.

Average liquidity ratio remained strong at 42.47%, versus 50.08% in the first half of 2007. The fall in average liquidity ratio was caused by the decline of average liquefiable assets with decreased marketable debt securities, coupled with the growth of average qualifying liabilities resulting from the increase in customer deposits.

#### **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 2008	Restated Half-year ended 30 June 2007	Increase/ (decrease)
			, ,
Net interest income	3,330	3,841	-13.3%
Other operating income	2,532	2,332	+8.6%
Operating income	5,862	6,173	-5.0%
Operating expenses	(2,879)	(2,581)	+11.5%
Operating profit before impairment allowances	2,983	3,592	-17.0%
Net charge of loan impairment allowances	(14)	(54)	-74.1%
Others	(4)	_	N/A
Profit before taxation	2,965	3,538	-16.2%

	At 30 June	At 31 December	Increase/
	2008	2007	(decrease)
Segment assets Segment liabilities	165,005	162,634	+1.5%
	524,774	545,397	-3.8%

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

#### Results

Personal Banking recorded a profit before taxation of HK\$2,965 million in the first half of 2008. Operating profit before impairment allowances declined by 17.0% to HK\$2,983 million because of lower net interest income and increased operating expenses, which was partly offset by the increase in other operating income.

Net interest income fell by 13.3% to HK\$3,330 million, mainly due to narrower deposit spread as average market interest rates were lower. Other operating income rose by 8.6% to HK\$2,532 million. Net fees and commission income increased by 5.1%, primarily attributable to the growth of income from the sales of bonds and structured products, RMB-related business, card business and currency exchange. Commission income from both stock broking and sale of funds dropped. However, income from foreign exchange activities grew strongly as business volume increased.

Operating expenses rose by 11.5% to HK\$2,879 million mainly because of higher staff costs after headcount increase and pay rise. Higher promotional expenses and IT costs also contributed to the increase in operating expenses.

Net charge of loan impairment allowances fell by 74.1% to HK\$14 million. This reflects an improvement in asset quality due to lower bad debt migration rate and rise in collateral values as well as an increase in recoveries.

Advances and other accounts, including mortgage loans and card advances, increased by 7.8% to HK\$153,205 million. Customer deposits fell by 2.3% to HK\$501,081 million as customers switched their funds to other higher yielding investments under the low interest rate environment.

# Ensuring growth and market recognition in residential property mortgage

In spite of fierce market competition, the Group grew its residential mortgage business by 9.0% through effective marketing and the introduction of a number of new mortgage products such as "8 Privilege Offers for the 2008 Olympics Mortgage Scheme" and "Olympic Decathlon Mortgage Scheme". The Group also set up four new Mortgage Advice Centres in selected areas to provide professional consultancy services to customers. All these innovative efforts, together with the Group's intrinsic strengths and track record, ensured that the Group could maintain its leading position in the residential mortgage market with the underwriting of new mortgages increasing by 65.4% year-on-year, outperforming the market average of 61.7%. Meanwhile, the credit quality of residential mortgages continued to improve as the delinquency and rescheduled loan ratio fell further to 0.08%. In recognition of its outstanding mortgage services, the Group was awarded the "Sing Tao Excellent Services Brand Award 2007 – Mortgage and Loan Services" and the "Capital Weekly Service Awards 2008 - Mortgage" by Sing Tao Daily and Capital Weekly respectively.

# Maintaining the competitiveness of investment and insurance businesses

In the first half of 2008, given the increasing concern over the global credit crisis and loss of confidence in the investment environment, stock markets throughout the world experienced a slump in general. Naturally, this had an adverse impact on the Group's investment-related agency businesses. Nevertheless, the Group made good progress in product innovation and further enhanced its business platform to meet customers' needs. Moreover, the Group expanded its bond and life insurance agency businesses considerably during the period. The Group continued to promote its stock brokerage business and improve its trading platforms and services such as the "Closing Auction Session for Securities Trading" and "Online Securities Margin Trading" services. In anticipation of a more volatile market in 2008, the Group launched the "Balanced Investment Funds Series" (the "Series") in December 2007 to raise customers' awareness of portfolio risk management while offering a wide array of investment products. As a result, the total number of funds available for selection in the Series increased and its contribution to the total fund sales significantly improved. The Group continued to expand its range of structured products and enhance its private placement services, leading to a strong growth of 200.2% in the sales of structured notes.

Regarding the life insurance agency business, with effective marketing, extensive staff training, optimised operation procedures and product innovation, the sales of life insurance products and related commission income surged by 64.7% and 70.0% respectively year-on-year\*. In terms of product innovation, the Group introduced a range of tailor-made products such as the "Fortuitous Saving Protection Plan" and "Pleasure 5-Year Saving Protection Plan" during the period to meet the diverse needs of customers.

To cope with customer's demand for all-encompassing protection products, the Group pioneered a first-of-its-kind bundled protection product in the market known as the "BOC Family Comprehensive Protection Plan". This product offers customers with extensive protection covering home content, annual travel, personal accident, golfer and domestic helper. Not surprisingly, customers' feedback on this product has been highly positive.

# Continuous expansion of high net worth customer base

The Group is committed to providing premium services to its high net worth customers. In the first half of 2008, the Group enhanced its private placement service which helped boost the sales volume of structured notes by 200.2%. To expand its high net worth customer base, the Group launched marketing campaigns such as the "Olympic Five Rings Rewards", offering a range of exclusive privileges on designated transactions in foreign currency fixed deposits, RMB services, fund subscription and securities trading. The Group also introduced the "Customer-Get-Customer Programme" by rewarding existing wealth management customers with privileges for new customers referred. As at the end of June 2008, the total number of wealth management customers\*\* grew by 14.4% versus end-2007. Meanwhile, assets of wealth management customers maintained with the Group declined by 1.8% amidst a volatile stock market.

<sup>\*</sup> Before inter-segment elimination

<sup>\*\*</sup> Including wealth management VIP and wealth management Prime customers

# Steady growth of credit card business

The Group's card business continued to expand due to active private consumption with the number of cards in issue increasing by 5.4% from the end of last year. At the same time, cardholder spending volume and merchant acquiring volume registered growths of 17.2% and 23.2% respectively.

To grasp business opportunities arising from the 2008 Beijing Olympics, the Group issued the "VISA BOC Olympic Games Platinum Card" in May 2008. In the same month, a new co-branded card, "BOC Esso MasterCard", was launched providing exclusive privileges to cardholders. These new cards not only enriched the Group's product range but also enhanced its product differentiation among the competitors. Meanwhile, the Group's card business in the Mainland continued to grow and the "EMV Titanium Card" was introduced during the period. The Group has also been benefiting from the bank card-related service and support in the Mainland market made available by BOC Services Company, Limited, a joint venture formed between BOC Credit Card (International) Ltd. and BOC in November 2007.

# Growing and leading RMB banking business in Hong Kong

The Group has maintained its leading position in RMB banking business in Hong Kong. To satisfy the surge in demand for RMB deposits in the first half of 2008, the Group launched "RMB Exchange Express" to provide customers with a more convenient service in their RMB exchange transactions. At the same time, the Group launched the "RMB Remittance Express" service in April 2008, providing customers with RMB remittance service to bank accounts in the Mainland with preferential handling charges. The Group has continued to enjoy the largest market share in its local RMB deposits-taking business

with the amount of deposits more than doubled in the first half of 2008. In respect of the RMB credit card business, the Group has also maintained its leading position as the number of RMB credit cards issued grew by 22.4% from the end of 2007 while the RMB card acquiring volume and RMB cardholder spending volume surged by 73.2% and 66.0% respectively year-on-year. At the end of June 2008, the number of ATMs providing RMB withdrawal service reached 326. Taking advantage of the Group's leading position in RMB business, the total number of RMB withdrawals in our ATM network in the first half of 2008 recorded a significant increase of 81.5% compared with the same period of 2007.

# Channel rationalisation and e-channel development

The Group continued to optimise its distribution channels. In the first half of 2008, the Group opened 1 new branch, renovated 12 existing branches and added 6 Wealth Management Centres and 4 Mortgage Advice Centres to its network in Hong Kong. As at the end of June 2008, the Group's service network in Hong Kong comprised of 289 branches.

Customers' satisfaction regarding the Group's service quality is of utmost importance to the Group. In the first half of 2008, the Group launched a comprehensive transaction survey programme in branches for obtaining customers' feedback on the Group's service improvement programmes. At the same time, the Group continued to enhance its e-banking channels, especially for investment functions, in order to strengthen its competitive edge in providing internet investment services. In the first half of 2008, the number of e-banking customers increased by 6.2% and the stock trading transactions carried out through e-channels accounted for 77.5% of total number of transaction.

# Corporate Banking

HK\$'m, except percentage amounts	Half-year ended 30 June 2008	Restated Half-year ended 30 June 2007	Increase/ (decrease)
Net interest income Other operating income	2,972	2,803	+6.0%
	1,132	863	+31.2%
Operating income Operating expenses	4,104	3,666	+11.9%
	(1,081)	(899)	+20.2%
Operating profit before impairment allowances  Net (charge)/release of loan impairment allowances  Others	3,023	2,767	+9.3%
	(57)	220	N/A
	(3)	–	N/A
Profit before taxation	2,963	2,987	-0.8%

	At 30 June 2008	At 31 December 2007	Increase/ (decrease)
Segment assets	339,456	281,680	+20.5%
Segment liabilities	324,447	284,353	+14.1%

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

#### **Results**

Corporate Banking achieved good results in the first half of 2008. Operating income increased by 11.9% to HK\$4,104 million, which was driven by the growth in both net interest income and other operating income. After accounting for the 20.2% increase in operating expenses, operating profit before impairment allowances rose by 9.3% to HK\$3,023 million. Profit before taxation fell by 0.8% to HK\$2,963 million, mainly due to the decline in loan recoveries and increase in loan impairment allowances.

Net interest income increased by 6.0% to HK\$2,972 million mainly due to the growth in loans and advances, which was partly offset by narrower deposit spread as average market interest rates dropped. Other operating income rose by 31.2% to HK\$1,132 million, thanks to the growth in fees income from loan and bills services.

Operating expenses were up 20.2% to HK\$1,081 million, mainly due to higher staff costs after headcount increase

and pay rise. Higher business tax for increased Mainland business and depreciation charges on computer equipment also contributed to the increase in operating expenses.

Net charge of loan impairment allowances was HK\$57 million, compared to the net release of HK\$220 million in the first half of 2007. The net charge reflected the reduction of loan recoveries and the increase in the loan impairment allowances made to cover the formation of new impaired loans and further deterioration of existing impaired accounts. In view of the unfavorable outlook of the macro economics and signs of deterioration of the US economy, precautionary measures have been implemented such as by tightening up the underwriting standards of credit approval and the monitoring of SME loans, revising the lending and pricing strategies on new credits of the segments concerned.

Advances and other accounts increased significantly by 20.3% to HK\$337,568 million. Customer deposits grew by 13.9% to HK\$320,692 million.

# Spearheading the growth of loan syndication

The Group has maintained its leading position in loan syndication. According to Basis Point, the Group remained the top mandated arranger in the markets of syndicated loans for both Hong Kong-Macau and the Mainland-Hong Kong-Macau in the first half of 2008. In January 2008, the Group was appointed as the "Asia-Pacific Syndicated Loan Centre" of the BOC Group with the responsibilities of initiating, coordinating and managing the syndicated loan business in the Asia-Pacific region. This appointment not only signifies the recognition of the Group's expertise and extensive experience in the syndicated loan market, but also helps it in exploring cross-border business opportunities in the wider region. It helps boost the Group's loan fee income as well as its syndicated lending. The Group established the first phase of the "Loan Syndication Information Management System" in the first half of 2008. This new system links up similar networks of the BOC Group's major branches, thus optimising the sharing of supporting information among group members and enhancing overall operational efficiency.

#### Making good progress in expanding SME business

The high-yielding SME business remains one of the Group's strategic focuses. In the first half of 2008, loans to the SME segment recorded a solid growth. The Group further strengthened its relationship with SME customers by launching a number of thematic marketing programmes and sponsoring a series of marketing activities. At the same time, the Group continued to enhance its product offerings and refine its products. In January 2008, the Group and the Hong Kong Productivity Council jointly launched the "Green Equipment Financing Scheme", a preferential lending package for corporate customers to acquire environment-friendly equipment. In addition, the Group introduced the "Corporate Privilege" services at selected branches to tailor-make services for targeted customers. These initiatives helped sustain the growth momentum of the SME business and resulted in a doubledigit growth of SME loans in the first half of 2008. In recognition of its success in the SME business, the Group was awarded the "SME's Best Partner Award 2008" by the Hong Kong Chamber of Small and Medium Business Limited and the "Capital Weekly Service Awards 2008 – SME Banking" by Capital Weekly during the period.

#### Solid growth of trade finance

The Group continued to step up its marketing efforts to stimulate the growth of the trade finance business. In the first half of 2008, the Group repositioned part of its operations to further improve its operational efficiency. In addition, the Group initiated the "Trade Facilities Reform Programme" in March 2008 to streamline the credit approval process and raise the utilisation rate of credit limit. With these initiatives, the outstanding balance of trade finance grew strongly by 30.5% compared to end-2007. The volume of trade bills settlement likewise grew significantly by 44% year-on-year.

#### Robust expansion of cash management

In the first half of 2008, the Group continued to design and consolidate cross-border cash management projects for large Mainland enterprises seeking global expansion. At the same time, the Group strove to maintain its competitive edge in the local cash management business by making continuous refinement on existing products such as "Integrated Receivables and Payment Solutions" and developing new products to meet the diverse needs of customers. Through effective marketing campaigns, the number of CBS Online customers increased by 23.0% while that of BOC Wealth Master customers grew by 6.6%.

#### Vigorous development of custody services

Custody business continued to grow in the first half of 2008. The Group has been actively exploring business opportunities in both local and overseas markets. During the period, the Group succeeded in becoming the custodian for a locally listed investment fund. In January 2008, the Group was appointed by one of the largest joint venture investment banks in the Mainland as the foreign custodian for its first QDII product, which was also the first broker-type QDII ever approved in the Mainland. The Group also successfully implemented several QDII mandates in the first half of 2008. At the end of June 2008, total assets under custody was HK\$295 billion.

#### Mainland Business

# **Strong growth of Mainland business**

Mainland business continued to be one of the high-growth segments of the Group. Following the implementation of a dualistic approach in the Mainland business with the local incorporation of Nanyang (China) in December last year, the Group's Mainland operation made good progress in business development. Total advances to customers grew by 17.2% to HK\$35.1 billion, with RMB loans surging by 26.0%. Customer deposits increased by 119.7% to HK\$12.7 billion. Total operating income recorded a satisfactory year-on-year growth of 15.4%, driven by strong growth in both net interest income and net fees and commission income which was, however, partially offset by the foreign exchange loss arising from the revaluation of Nanyang (China)'s Hong Kong Dollar capital funds against the appreciated RMB. Operating profit before impairment allowances fell by 7.6% yearon-year. Should the estimated impact of the exchange revaluation of the Mainland operation's capital funds be excluded\*, operating profit before impairment allowances would have increased by 40.3%. Loan quality remained sound, with the classified loan ratio standing at 0.78%, an increase of 0.10 percentage point from end-2007 mainly due to the downgrade of an individual account.

By the end of June 2008, the Group's network in the Mainland consisted of 15 branches and sub-branches (including those of Nanyang (China)). 13 branches and sub-branches had already been permitted to conduct RMB business\*\*. On 24 July 2008, the head office of Nanyang (China) was approved to start its domestic retail RMB business. In the first half of 2008, the China Banking Regulatory Commission ("CBRC") had approved Nanyang (China)'s application to establish its Hangzhou branch, Nanning branch and Shanghai Xuhui sub-branch, while Guangzhou Panyu sub-branch commenced business on 23 July 2008. Meanwhile, the Group has launched a series of structured products as well as QDII products to expand its wealth management business in the Mainland and at the same time to enhance its cross-border financial services to better serve both personal and corporate customers.

<sup>\*</sup> The estimated impact of the exchange revaluation of the Mainland operation's capital funds included the exchange revaluation loss of Nanyang (China)'s HKD capital funds and the revaluation gain of the RMB operating funds of the Group's other mainland branches.

<sup>\*\*</sup> Except for Mainland residents

# Treasury

HK\$'m, except percentage amounts	Half-year ended 30 June 2008	Restated Half-year ended 30 June 2007	Increase/ (decrease)
Net interest income Other operating income	3,456 933	2,451 51	+41.0% +1,729.4%
Operating income Operating expenses	4,389 (431)	2,502 (258)	+75.4% +67.1%
Operating profit before impairment allowances Net charge of impairment allowances on	3,958	2,244	+76.4%
securities investments  Profit before taxation	1,809	2,244	N/A -19.4%

2007	Increase/ (decrease)
566,661	-0.6% +32.8%
	116,095

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

# **Results**

The Treasury segment grew its operating income by 75.4% to HK\$4,389 million year-on-year owing mainly to the growth in both net interest income and other operating income. Operating profit before impairment allowances increased by 76.4% to HK\$3,958 million after accounting for the 67.1% growth in operating expenses. Profit before taxation declined by 19.4% owing to a net charge of HK\$2,149 million of impairment allowances on securities investments.

The 41.0% rise in the net interest income was made possible by higher interest spread on the debt securities portfolio with lower funding cost as interest rate declined.

Other operating income also rose significantly by HK\$882 million to HK\$933 million. This was mainly attributable to lower marked-to-market loss on foreign exchange swap contracts and higher income from other foreign exchange activities driven by increased business volume of foreign exchange and structured deposits. Income from equity

instrument and commodities also increased, mainly driven by the newly launched "Equity-Linked Investments" and higher customer demand for bullion products. A gain on disposal of securities was recorded for the sale of Visa Inc. shares.

Operating expenses rose by 67.1% to HK\$431 million, mainly due to higher staff costs after headcount increase and pay rise as well as increased IT costs and depreciation charge on computer equipment.

In the first half of 2008, further deterioration of the capital market had an impact on the Group's securities investments in the US and hence the related provisions. The Group carried out a comprehensive assessment on its impairment charges, taking into account the relevant criteria and other specific features of the investments, and increased its provisions accordingly. As a result, a net charge of impairment allowances on securities investments of HK\$2,149 million was made for the Group's portfolio of US mortgage-backed securities. Following the reporting period end, the market continues to weaken which may

further impact the Group's securities investments. The Group will closely monitor future market development and proactively manage its investment portfolio.

At the end of June 2008, the Group's debt securities investments amounted to HK\$258.9 billion. 98% of the portfolio was rated A or better\*. The Group's exposures to US subprime mortgage-backed securities, US Alt-A and US Prime residential mortgage-backed securities amounted to HK\$1.2 billion, HK\$5.2 billion and HK\$24.4 billion respectively. Exposures to Freddie Mac and Fannie Mae, the US mortgage agencies, totalled HK\$5.5 billion.

\* The ratings were based on Moodys' ratings or their equivalent to the respective issues of the debt securities. For those with no issue rating, their issuer ratings were used.

# Diversifying investment portfolio and enhancing portfolio management

The sentiment of the capital market further deteriorated in the first half of 2008 due to the worsening credit crunch and liquidity concerns which meant that the operating environment for treasury business was very challenging. Against this backdrop, credit spread increased to the widest level in recent years. While the Group conducted detailed analyses and closely monitored its treasury portfolio to ensure the overall credit risk was maintained at an acceptable level, it also adopted appropriate investment strategies to take advantage of the wider

credit spread under the low interest rate environment. By expanding investments in certain high-quality debt securities of money centre banks, the Group not only diversified its investment portfolio, but also improved its investment return. Meanwhile, under the operation of three specialised investment teams each focusing on different markets and with the implementation of the Asset Liability Management System last year, the Group's investment decision-making process and portfolio management were further enhanced. More advanced analytical models and systems are now in place to help maximise the return on surplus funds in the volatile market.

# Enhancing product manufacturing capabilities and improving product cross-selling efforts

The Group continued to develop treasury products to meet customers' needs. In response to a volatile equity and foreign exchange market, the Group enhanced the varieties of its product offerings. After the launch of its first structured notes and equity warrants last year, the Group further expanded its product offerings by introducing its first equity-linked investment products under its own brand in January 2008. At the same time, by cross-selling with the Corporate Banking unit, currency-linked structured deposits were offered to major corporate customers which helped boost the sales of structured products significantly.

### Insurance

HK\$'m, except percentage amounts	Half-year ended 30 June 2008	Half-year ended 30 June 2007	Increase/ (decrease)
Net interest income Other operating income	538	346	+55.5%
	2,955	2,441	+21.1%
Operating income  Net insurance benefits and claims	3,493	2,787	+25.3%
	(3,602)	(2,632)	+36.9%
Net operating income	(109)	155	N/A
Operating expenses	(69)	(48)	+43.8%
(Loss)/Profit before taxation	(178)	107	N/A

	At 30 June	At 31 December	Increase/
	2008	2007	(decrease)
Segment assets Segment liabilities	27,738	24,545	+13.0%
	25,982	23,182	+12.1%

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

#### Results

The Group's Insurance segment registered a growth of 25.3% in operating income, driven by increases in net interest income and other operating income. However, after accounting for the increases in net insurance benefits and claims by 36.9% and operating expenses by 43.8%, the segment recorded a loss before taxation of HK\$178 million in the first half of 2008.

Net interest income rose by 55.5% to HK\$538 million primarily because of an increase in investments in debt securities made by the significant growth of premium income. Other operating income increased by 21.1% to HK\$2,955 million which was driven by the 53.4% growth of net insurance premium income but partially offset by the marked-to-market loss of its debt securities and equity investments. At the same time, net insurance benefits and claims rose by 36.9% mainly due to the growth of new business. During the period, the segment achieved significant growth of single premium endowment products which created the new business strain on its current year profitability. It was caused by the initial outlay such as commission and reserves charged when a new policy was written. However, the future income stream from the related investments would gradually repay the initial outlay and be reflected in future profit.

Assets in the Insurance segment grew by 13.0% because of the increase in debt securities investments. Liabilities rose by 12.1% with an increase in insurance contract liabilities.

# **Driving sales by product innovation**

By offering a wide range of products, the Group continued to expand its insurance business. In the first half of 2008, new single premium products such as the "Fortuitous Saving Protection Plan" and "Pleasure 5-Year Saving Protection Plan" were introduced and received good response from customers. A new life product targeting SME businesses was also launched. At the same time, a series of promotional and marketing activities were rolled out to drive the sales of regular pay products such as the "Companion Insurance Plan" and "Get-Free Insurance

Plan". As a result, premium income of single and regular pay products\* were up 56.5% and 31.2% respectively year-on-year. BOC Life ranked number one in the market in terms of total new business premium in the first quarter of 2008 and its market share as of the first quarter of 2008 was increased from end-2007.

# Developing multi-channel platform

Following the establishment of BOC Life's telemarketing call centre in late 2007, a direct insurance specialist team was set up in the first half of 2008 and stationed at the Group's branches for providing customers with financial needs analysis and cross selling life insurance products.

# RISK MANAGEMENT Banking Group Overview

The Group believes that sound risk management is crucial to the success of any organisation. In its daily operation, the Group attaches a high degree of importance to risk management and emphasises that a balance must be struck between risk control and business growth and development. The principal types of risk inherent in the Group's businesses are reputation risk, legal and compliance risk, strategic risk, credit risk, market risk, interest rate risk, liquidity risk and operational 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.

<sup>\*</sup> Before group elimination

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 ("AC") assists the Board in fulfilling its role in overseeing the internal control system.

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

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

The Group's principal banking subsidiaries, Nanyang 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 a commitment it has entered into with the Group and will cause a financial loss. The Chief Credit Officer ("CCO") reports directly to the CRO and is responsible for the management of credit risk and for the formulation of all credit policies and procedures. 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 independently reviewed and objectively assessed by risk management units. A small business credit scorecard is used to assist the credit assessment of small enterprise credit facilities. A credit scoring system is used to process retail credit transactions, including residential mortgage loans, personal loans and credit cards. 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 Deputy Chief Executives 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 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 the mark-to-market (MTM) price of the issue and its external credit rating, but also other factors including its FICO score, vintage, collateral location, adjustable rate mortgage ("ARM") status, delinquencies, level of collateral protection, loan to value ratio and

prepayment speed. 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 curves 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. The Treasury Department ("TD") manages the interest rate risk according to the established policies. The Finance Department ("FD") closely monitors the related risks and the results are reported to ALCO regularly. RMD reviews the policies, guidelines and limits proposed by the TD.

Gap analysis is one of the tools used to measure the Group's exposure to repricing risk. 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.

# **Market Risk Management**

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

#### Market risk management framework

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, commodity prices and equity products. Transactions are classified into different risk product categories according to the prominent type of risk inherent in the transactions.

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 the oversight of 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 based on restricting individual operations to trading within various market

risk limits approved by the RC, and a list of permissible instruments authorised by senior management, as well as enforcing rigorous new product approval procedures to ensure that all risks that arise are thoroughly identified, properly measured and adequately controlled.

The Group also uses 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.

The Group has changed its VAR calculation from a variance/co-variance basis to historical simulation basis with effect from April 2007. The Group uses historical movements in market rates and prices, a 99% confidence level and a 1-day holding period to calculate portfolio and individual VAR. Movements in market prices are calculated by reference to market data from the last two years.

The following table sets out the VAR for all trading market risk exposure<sup>1</sup> of BOCHK.

HK\$'m	At 30 June 2008	Minimum for the first half of 2008	Maximum for the first half of 2008	Average for the first half of 2008
VAR for all market risk	6.3	3.0	7.8	5.2
VAR for foreign exchange risk products	5.7	2.8	7.3	4.6
VAR for interest rate risk products	3.3	1.0	3.8	2.1
VAR for equity risk products	0.2	0.2	2.8	0.6
VAR for commodity risk products	0.0	0.0	0.5	0.1

	At 30 June	Minimum for the first half	Maximum for the first half	Average for the first half
HK\$'m	2007	of 2007	of 2007	of 2007
VAR for all market risk	2.8	1.4	4.8	3.1
VAR for foreign exchange risk products	3.5	1.0	5.2	3.4
VAR for interest rate risk products	1.3	0.7	3.1	1.8
VAR for equity risk products	0.3	0.1	0.6	0.3
VAR for commodity risk products	0.0	0.0	0.4	0.1

<sup>1</sup> Structural FX positions have been excluded.

<sup>2</sup> Revenues from structural FX positions and back to back transactions have been excluded.

In the first half of 2008, the average daily revenue<sup>2</sup> of BOCHK earned from market risk-related trading activities was HK\$6.0 million (first half of 2007: HK\$2.6 million).

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 oneday 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. 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 1997 Asian 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 without forced liquidation of its assets at short notice.

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.

The Group monitors the liquidity risks using cash flow analysis (under normal condition and stress conditions respectively) and by examining deposit stability, concentration risk, mismatch ratios, loan-to-deposit ratio and liquidity profile of the investment portfolio. 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 and ALCO is responsible for establishing these policy directives (including the liquidity contingency plan), and RC sanctions the liquidity management policies. TD manages the liquidity risk according to the established policies. FD monitors the Group's liquidity risks and reports to ALCO regularly. RMD reviews the policies, guidelines and limits proposed by the TD.

# **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 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. RMD formulates corporate-level policies and procedures concerning operational risk management which are approved by RC. The management of respective business lines is 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. These are followed by periodic monitoring and ongoing review of changes by RMD. Besides the current operational risk status, trends derived from historical data are served as alert on potential risks. RMD evaluates the operational risk profile, records operational risk data and reports operational risk issues to RC and senior management. 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 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 its Reputation Risk Management Policy that is diligently implemented. This policy provides guidance to prevent and manage reputation risk proactively at an early stage. It requires constant monitoring of external reputation risk incidents and published failures of risk incidents in the financial industry.

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

Legal risk is the risk that unenforceable contracts, lawsuits or adverse judgments may disrupt or otherwise negatively affect the 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 any failure to comply with all applicable laws and regulations. By establishing and maintaining appropriate policies and guidelines, the CRO, working through the Legal and Compliance Department, is responsible for proactively identifying and managing these risks

# **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.

# **Capital Management**

The major objective of capital management is to maximise total shareholders' 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. 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 was 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 and ALCO monitors the results against limits approved by RC. Stress test results are also reported 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, linked long-term business and retirement scheme management in Hong Kong. Major types of risks inherent

in the BOC Life's insurance business include insurance risk, investment risk, interest rate risk and credit risk. BOC Life manages these risks independently and reports to RC on a regular basis. The key risks of its insurance business and related risk control process are as follows:

# **Insurance Risk Management**

BOC Life is in the business of insuring against the risk of mortality, morbidity, disability, critical illness, accidents and related risks. 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 the 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 by it, BOC Life has a retention limit on any single life insured. BOC Life reinsures the excess of the insured benefit over the limit for standard risks (from a medical point of view) under an excess of loss reinsurance arrangement. BOC Life does not have in place any reinsurance for contracts that insure against survival risk.

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. 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.

### **Investment Risk Management**

The primary investment objective of BOC Life is to generate returns adequately match its insurance liabilities. Movements in market rates such as an increase in interest rates may result in a depreciation of the value of the bond portfolio. A fall in equity market may impact the value of assets or return on investments. BOC Life has an approved market risk mandate and documented procedures to ensure that exposures remain within the mandate and its investment management process is monitored by its Investment Committee.

# **Interest Rate Risk Management**

The main risk that BOC Life faces due to the nature of its investment and liabilities is interest rate risk. BOC Life manages these positions within an asset liability management ("ALM") framework that has been developed to achieve long-term investment returns in excess of its obligations under insurance contracts. For each distinct category of liabilities, a separate portfolio of assets is maintained. The principal technique of ALM is to match assets with the liabilities arising from insurance contracts by reference to the types of benefits payable to contracts holders.

# **Counterparty Risk Management**

BOC Life has exposure to counterparty risk, which is the risk that a counterparty will be unable to pay amounts in full when due. Key areas where BOC Life's insurance business is exposed to include:

- counterparty risk with respect to structured products transactions and debt securities
- 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 counterparty 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.