Unaudited Supplementary Financial Information

1. Capital adequacy ratio

	At 30 June 2003	At 31 December 2002*
Capital adequacy ratio	**14.66%**	13.99%
Adjusted capital adequacy ratio	**14.87%**	14.39%

The CAR is computed on the consolidated basis that comprises the positions of BOCHK and certain subsidiaries specified by the HKMA for its regulatory purposes and in accordance with the Third Schedule of the Banking Ordinance.

The adjusted CAR taking into account market risk exposure as at the balance sheet date is computed in accordance with the guideline on "Maintenance of Adequate Capital Against Market Risks" under the Supervisory Policy Manual issued by the HKMA and on the same basis as for the unadjusted CAR.

2. Components of capital base after deductions

The consolidated capital base after deductions used in the calculation of the above capital adequacy ratios as at 30 June 2003 and 31 December 2002 and reported to the HKMA is analysed as follows:

	At 30 June 2003 HK$'m	At 31 December 2002* HK$'m
Core capital:		
Paid up ordinary share capital	**43,043**	43,043
Reserves	**10,452**	8,087
Profit and loss account	**1,302**	2,360
Minority interests	**892**	867
	55,689	54,357
Supplementary capital:		
General provisions for doubtful debts	**5,077**	5,200
Total capital base before deductions	**60,766**	59,557
Deductions:		
Shareholdings in subsidiaries or holding company	**(449)**	(482)
Exposures to connected companies	**(841)**	(918)
Equity investments of 20% or more in non-subsidiary companies	**(117)**	(171)
Investments in the capital of other banks or other financial institutions	**(1)**	(1)
	(1,408)	(1,572)
Total capital base after deductions	**59,358**	57,985

* Prior year comparatives have not been restated on adoption of SSAP 12 (revised) "Income taxes".

Unaudited Supplementary Financial Information (continued)

3. Liquidity ratio

	Half-year ended 30 June 2003	Half-year ended 30 June 2002
Average liquidity ratio	**37.93%**	41.26%

The average liquidity ratios for the half-year ended 30 June 2003 and 30 June 2002 are calculated as the simple average of each calendar month's average liquidity ratio of BOCHK for the period.

The liquidity ratio is computed on the solo basis (the Hong Kong offices only) and is in accordance with the Fourth Schedule of the Banking Ordinance.

4. Currency concentrations

The following is a summary of the major foreign currency exposures arising from trading, non-trading and structural positions. The net option position is calculated based on the worst-case approach set out in the prudential return "Foreign Currency Position" issued by the HKMA.

	At 30 June 2003 Equivalent in millions of HK$										
	US Dollars	**Pound Sterling**	**Japanese Yen**	**Euro Dollars**	**Swiss Franc**	**Australian Dollars**	**New Zealand Dollars**	**Macau Pataca**	**Renminbi Yuan**	**Others**	**Total**
Spot assets	**161,334**	**8,619**	**12,040**	**19,666**	**146**	**19,876**	**10,009**	**137**	**1,023**	**7,132**	**239,982**
Spot liabilities	**(132,231)**	**(14,816)**	**(3,002)**	**(11,956)**	**(718)**	**(25,792)**	**(13,492)**	**(1)**	**(750)**	**(11,289)**	**(214,047)**
Forward purchases	**114,186**	**9,850**	**13,550**	**11,868**	**8,988**	**17,621**	**7,983**	**—**	**—**	**5,774**	**189,820**
Forward sales	**(142,654)**	**(3,786)**	**(22,645)**	**(19,957)**	**(8,358)**	**(11,824)**	**(4,561)**	**—**	**—**	**(1,639)**	**(215,424)**
Net options position	**(647)**	**13**	**8**	**182**	**—**	**216**	**178**	**—**	**—**	**51**	**1**
Net long/(short) position	**(12)**	**(120)**	**(49)**	**(197)**	**58**	**97**	**117**	**136**	**273**	**29**	**332**

	At 31 December 2002 Equivalent in millions of HK$										
	US Dollars	Pound Sterling	Japanese Yen	Euro Dollars	Swiss Franc	Australian Dollars	New Zealand Dollars	Macau Pataca	Renminbi Yuan	Others	Total
Spot assets	168,003	7,641	19,227	16,688	404	23,525	11,809	141	611	5,176	253,225
Spot liabilities	(135,565)	(16,461)	(2,595)	(10,753)	(703)	(27,799)	(15,226)	(1)	(425)	(6,548)	(216,076)
Forward purchases	102,549	12,188	14,640	7,025	5,756	8,798	5,381	—	—	2,076	158,413
Forward sales	(138,688)	(3,474)	(31,354)	(13,279)	(5,491)	(4,541)	(1,884)	—	—	(703)	(199,414)
Net options position	(444)	13	—	41	—	192	100	—	—	101	3
Net long/(short) position	(4,145)	(93)	(82)	(278)	(34)	175	180	140	186	102	(3,849)

There were no significant net structural positions for the Group as at 30 June 2003 and 31 December 2002.

Unaudited Supplementary Financial Information (continued)

5. Segmental information

(a) Sectoral analysis of gross advances to customers

The information concerning gross advances to customers has been analysed into loans used inside or outside Hong Kong by industry sectors of the borrowers as follows:

	At 30 June 2003 HK$'m	At 31 December 2002 HK$'m
Loans for use in Hong Kong		
Industrial, commercial and financial		
— Property development	**28,247**	26,591
— Property investment	**48,728**	50,992
— Financial concerns	**8,214**	8,891
— Stockbrokers	**84**	82
— Wholesale and retail trade	**23,709**	23,781
— Manufacturing	**13,122**	12,834
— Transport and transport equipment	**12,643**	11,192
— Others	**43,047**	40,440
Individuals		
— Loans for the purchase of flats in Home Ownership Scheme, Private Sector Participation Scheme and Tenants Purchase Scheme	**18,890**	19,956
— Loans for purchase of other residential properties	**84,895**	85,853
— Credit card advances	**3,385**	3,554
— Others	**7,950**	8,469
Total loans for use in Hong Kong	**292,914**	292,635
Trade finance	**9,195**	8,873
Loans for use outside Hong Kong	**19,072**	19,526
Gross advances to customers	**321,181**	321,034

Unaudited Supplementary Financial Information (continued)

5. Segmental information (continued)

(b) Geographical analysis of gross advances to customers, overdue advances and non-performing loans

The following geographical analysis of gross advances to customers, advances overdue for over three months and NPLs is based on the location of the counterparties, after taking into account the transfer of risk in respect of such advances where appropriate.

(i) Gross advances to customers

	At 30 June 2003 HK$'m	At 31 December 2002 HK$'m
Hong Kong	**304,393**	304,924
Mainland China	**7,094**	4,456
Others	**9,694**	11,654
	321,181	321,034

(ii) Advances overdue for over three months

	At 30 June 2003 HK$'m	At 31 December 2002 HK$'m
Hong Kong	**15,760**	17,060
Mainland China	**923**	1,402
Others	**145**	163
	16,828	18,625

(iii) Non-performing loans

	At 30 June 2003 HK$'m	At 31 December 2002 HK$'m
Hong Kong	**23,525**	23,653
Mainland China	**1,259**	1,755
Others	**265**	251
	25,049	25,659

Unaudited Supplementary Financial Information (continued)

6. Cross-border claims

The information on cross-border claims discloses exposures to foreign counterparties on which the ultimate risk lies, and is derived according to the location of the counterparties after taking into account any transfer of risk. In general, such transfer of risk takes place if the claims are guaranteed by a party in a country, which is different from that of the counterparty or if the claims are on an overseas branch of a bank whose head office is located in another country. Only regions constituting 10% or more of the aggregate cross-border claims are analysed by geographical areas and disclosed as follows:

	Banks and other financial institutions HK$'m	Public sector entities HK$'m	Others HK$'m	Total HK$'m
At 30 June 2003				
Asia, other than Hong Kong				
— Mainland China	31,677	2,081	8,046	41,804
— Others	43,608	680	4,855	49,143
	75,285	2,761	12,901	90,947
North America				
— United States	9,081	15,143	17,563	41,787
— Others	14,379	2,865	11	17,255
	23,460	18,008	17,574	59,042
Western Europe				
— France	30,858	—	2,837	33,695
— Germany	37,448	—	6,231	43,679
— Others	85,248	896	11,405	97,549
	153,554	896	20,473	174,923
Total	252,299	21,665	50,948	324,912

Unaudited Supplementary Financial Information (continued)

6. Cross-border claims (continued)

	Banks and other financial institutions HK$'m	Public sector entities HK$'m	Others HK$'m	Total HK$'m
At 31 December 2002				
Asia, other than Hong Kong				
— Mainland China	36,489	2,665	5,426	44,580
— Others	44,078	6,015	4,160	54,253
	80,567	8,680	9,586	98,833
North America				
— United States	8,133	10,594	15,703	34,430
— Others	12,158	2,647	14	14,819
	20,291	13,241	15,717	49,249
Western Europe				
— France	28,623	—	3,372	31,995
— Germany	36,172	—	10,743	46,915
— Others	81,220	1,451	9,139	91,810
	146,015	1,451	23,254	170,720
Total	246,873	23,372	48,557	318,802

Unaudited Supplementary Financial Information (continued)

7. Overdue and rescheduled assets

(a) Overdue and non-performing loans

	At 30 June 2003		At 31 December 2002	
	Amount HK$'m	**% of gross advances to customers**	Amount HK$'m	% of gross advances to customers
Gross advances to customers which have been overdue for:				
— six months or less but over three months	**1,952**	**0.61%**	2,240	0.70%
— one year or less but over six months	**2,174**	**0.68%**	3,486	1.08%
— over one year	**12,702**	**3.95%**	12,899	4.02%
Advances overdue for over three months	**16,828**	**5.24%**	18,625	5.80%
Less:				
Amount overdue for over three months and on which interest is still being accrued	**(158)**	**(0.05%)**	(550)	(0.17%)
Add:				
Amount overdue for three months or less and on which interest is being placed in suspense or on which interest accrual has ceased				
— included in rescheduled advances	**1,319**	**0.41%**	1,436	0.45%
— others	**7,060**	**2.20%**	6,148	1.91%
Gross non-performing loans	**25,049**	**7.80%**	25,659	7.99%

At 30 June 2003 and 31 December 2002, there were no advances to banks and other financial institutions that were overdue for over three months.

Unaudited Supplementary Financial Information (continued)

7. Overdue and rescheduled assets (continued)

(b) Other overdue assets

	At 30 June 2003 HK$'m	At 31 December 2002 HK$'m
Overdue for:		
— six months or less but over three months	**4**	3
— one year or less but over six months	**2**	1
	6	4

As at 30 June 2003, other overdue assets represented the accrued interest.

(c) Rescheduled advances to customers

	At 30 June 2003		At 31 December 2002	
	Amount HK$'m	**% of gross advances to customers**	Amount HK$'m	% of gross advances to customers
Rescheduled advances to customers	**1,335**	**0.42%**	1,464	0.46%

Advances with a specific repayment date are classified as overdue when the principal or interest is overdue and remains unpaid. Advances repayable by regular instalments are classified as overdue when an instalment payment is overdue and remains unpaid. Advances repayable on demand are classified as overdue either when a demand for repayment has been served on the borrower but repayment has not been made in accordance with the instruction or when the advances have remained continuously outside the approved limit that was advised to the borrower.

Rescheduled advances are those advances that have been restructured or renegotiated because of a deterioration in the financial position of the borrower or of the inability of the borrower to meet the original repayment schedule and for which the revised repayment terms, either of interest or of repayment period, are non-commercial. Rescheduled advances, which have been overdue for more than three months under the revised repayment terms, are included under overdue advances. Rescheduled advances are stated after deduction of accrued interest that has been charged to customers but accrued to a suspense account and before deduction of specific provisions.

As at 30 June 2003 and 31 December 2002, there were no rescheduled advances to banks and other financial institutions.

Unaudited Supplementary Financial Information (continued)

8. Repossessed assets held

	At 30 June 2003 HK$'m	At 31 December 2002 HK$'m
Repossessed assets held	**1,703**	2,097

Repossessed assets are properties or securities in respect of which the Group has acquired access or control (e.g. through court proceedings or voluntary actions by the borrowers concerned) for release in full or in part of the obligations of the borrowers. Upon repossession of the assets, the related loans and advances will continue to be recorded as loans and advances until all collection efforts have been exhausted and the repossessed assets are realised. Specific provisions will be made after taking into account the market value of the repossessed assets which are yet to be disposed. Upon disposal of the repossessed assets, any specific provisions previously made will be utilised to write off the loans and advances.

9. Risk management

Overview

Management of risk is fundamental to the business of the Group and is an integral part of its strategy. The principal types of risk inherent in the Group's business include credit risk, market risk (including interest rate and exchange rate risk), liquidity risk and operational risk. The Group's risk management goal is to maximise its long-term risk-adjusted return on capital, reduce the wide volatility in earnings and increase shareholder value, while maintaining its risk exposures within acceptable limits.

Risk Management Structure

BOCHK's risk management policies are designed to identify and analyse credit risk, market risk, liquidity risk and operational risk, to set appropriate risk limits, and to continually monitor these risks and limits by means of administrative procedures and information systems. BOCHK continually modifies and enhances its risk management policies and procedures to reflect changes in markets and products.

To achieve BOCHK's risk management goals, BOCHK established, in connection with its reorganisation, a more centralised, independent and comprehensive risk management structure that involves the following elements:

— a standardised corporate governance structure to provide active oversight and participation by the Board of Directors, committees and senior management;
— reporting lines that are independent of BOCHK's SBUs;
— uniform risk management policies, procedures and limits by which BOCHK identifies, measures, monitors and controls inherent risks;
— improved risk measurement, monitoring and management information systems to support business activities and risk management; and
— clearly defined risk management responsibilities and accountability.

BOCHK has developed and implemented comprehensive risk management policies and procedures to identify, measure, monitor and control credit risk, market risk, liquidity risk and operational risk across the organisation. The RMC under the Board of Directors is responsible for approving risk management policies and procedures and significant asset and liability management policies proposed by the ALCO.

Unaudited Supplementary Financial Information (continued)

9. Risk management (continued)

Risk Management Structure (continued)

Each SBU is responsible for the implementation of appropriate policies, procedures and controls in relation to risk management. Our CRO oversees and monitors the operations of the RMD and reports directly to the RMC. Our CRO is also responsible for assisting the Chief Executive on the bank-wide credit risk, market risk and operational risk management and submitting to the RMC the independent risk management report each month.

Our CFO has oversight responsibilities for the soundness of the Group's capitalisation and earnings. In addition, our CFO, with assistance of the Treasurer, monitors the bank-wide interest rate risk and liquidity risk and reports the financial position of the bank relating to interest rate risk and liquidity risk to the ALCO and the RMC on a regular basis.

BOCHK's principal banking subsidiaries, Nanyang and Chiyu, also face the same types of inherent business risks and they adopt consistent risk management strategies and policies as BOCHK. These subsidiaries execute their risk management strategy independently and functionally report to BOCHK's management on a regular basis.

Credit Risk Management

Credit risk is the risk that a customer or counterparty will be unable or unwilling to meet a commitment that it has entered into with BOCHK. Credit risk arises principally from BOCHK's lending, trade finance and treasury operations.

BOCHK's primary goal in credit risk management is to maximise its risk-adjusted rate of return while maintaining its credit risk exposure within acceptable parameters. In particular, BOCHK has developed and implemented comprehensive policies and procedures to identify, measure, monitor and control credit risk across the organisation. The RMC sets the Group's overall risk management strategy and policies, the Group's overall risk limits and credit authorisation systems. The RMC is responsible for reviewing and approving the Group's risk management policies and procedures as well as modifications to these policies and procedures. BOCHK's credit risk management structure seeks to meet its primary goal by:

— establishing an appropriate credit risk environment;
— enforcing prudent procedures for approving credits;
— maintaining an appropriate credit administration, measurement and monitoring process; and
— ensuring adequate independent oversight and control over credit risk.

Consistent with BOCHK's overall risk management objectives, the key principles that ensure effective implementation of BOCHK's credit risk management strategy are:

— balancing BOCHK's tolerance for risk with the level of expected returns;
— diversifying BOCHK's loan portfolio by geographic regions, industries, products, customers, maturities and currencies;
— maintaining the independence of the credit review process to ensure risk assessment and monitoring are conducted in an objective and comprehensive manner;
— emphasising the importance of cash flow as an essential factor in assessing applicants' repayment ability;
— compliance with legal and regulatory requirements;
— assigning clearly defined credit risk management responsibilities and accountability to each relevant operating unit and people involved in the risk management process;

Unaudited Supplementary Financial Information (continued)

9. Risk management (continued)

Credit Risk Management (continued)

— avoiding over-reliance on collateral and guarantees;
— ensuring accurate measurement and full disclosure of credit risk exposure; and
— maintenance of consistent credit policy.

Credit Risk Management Structure

BOCHK's Board of Directors, representing the shareholders' overall interests, is responsible for determining its credit risk management strategic objectives and principles. The Board, with the aim of maximising BOCHK's risk-adjusted returns as well as shareholders' wealth, holds ultimate responsibility for BOCHK's overall credit risk management process.

The RMC is a board level committee that has the responsibility of determining and revising BOCHK's credit risk management policies and procedures. BOCHK believes that independence and proper checks-and-balances are of critical importance in effective risk management. To this purpose, in BOCHK's managerial/organisational structure, the RMD and the Audit Department are placed onto the hierarchical position in which they report directly to the RMC and Audit Committee respectively. All these committees and departments form an independent line of control.

In addition, respective responsibilities, accountabilities and authorities related to credit risk management are clearly defined throughout BOCHK.

The Chief Executive is responsible for, among other things, implementing the credit risk management strategy and significant policies approved by the Board. The Chief Executive is also charged with balancing BOCHK's goal of generating a high yield on its assets with the need to maintain risk exposure within the shareholder's tolerance level.

The Credit Committee has primary responsibility for reviewing and approving loans exceeding the credit extension limit of the deputy chief executives of credit initiation unit, loans exceeding the credit extension limit of the head of the Special Assets Management Department in the course of restructuring classified loans, loans exceeding the veto right of the CRO and applications which have been vetoed by our CRO and in respect of which an appeal has been lodged with the credit committee. BOCHK's credit initiation units, such as Corporate Banking, Retail Banking and China Business Head Office, act as the first line of risk control. They are required to conduct business activities within the limits of delegated authority and in accordance with BOCHK's credit risk management strategy, policies and procedures.

The RMD, being structurally independent to credit initiation units, assists the Chief Executive in managing credit risk based on the credit risk management strategies and policies. It also provides independent due diligence relating to identifying, measuring, monitoring and controlling credit risk. To avoid any potential conflicts of interest, the credit review functions are independent of the business development units. Multilevel credit approval authorities are set depending mostly on the credit officers' professional experience, skill and responsibilities. All credit approval and review authorities originate from BOCHK's Board of Directors.

The Special Assets Management Department is responsible for the collection of NPLs. Other departments, though not specified above, are also charged with relevant matters in relation to credit risk management.

Unaudited Supplementary Financial Information (continued)

9. Risk management (continued)

Credit Approval Procedures

BOCHK employs discriminatory approval procedures for high-risk loans and low-risk loans.

Low risk credit transactions that fulfil certain requirements relating to credit types, loan purposes, loan amount, guarantee, collateral coverage and security adequacy are processed using low risk loan approval procedures. Under these procedures, authorised credit officers in credit initiation units may approve this type of credit applications without prior review by the RMD. The corresponding loan review officer in the RMD should conduct independent post-approval reviews of such pre-approved low risk credit transactions and assess if initial credit decisions have been made in accordance with the established procedures.

For high-risk loans, credit officers in credit initiation units can only accept and review loan applications and make the initial lending decisions. These credit applications are then independently evaluated by review officers in the RMD in the respect of compliance with policies and procedures, adequacy of credit risk assessment, and information sufficiency. The RMD is authorised to exercise the right of veto or concurrence based on the review conclusions.

Significant loans include loans exceeding the credit extension limit of the deputy chief executives of the Group's credit initiation units, loans exceeding the credit extension limit of the head of the Special Assets Management Department in the course of restructuring classified loans, loans exceeding the approval right of the CRO and loan applications which have been vetoed by our CRO and in respect of which an appeal has been lodged with the Credit Committee. Significant loans are reviewed and approved by the Credit Committee.

Credit Risk Assessment

The result of credit risk assessments is a critical factor in making credit decisions. BOCHK's credit assessment emphasises a thorough understanding of the purpose and structure of the loan, the borrower's financial status, cash flow position and repayment ability as well as business management. BOCHK also evaluates the industry risk associated with the corporate borrowers. When assessing an individual loan application, BOCHK considers overall credit risk at the portfolio level.

Credit Risk Monitoring

BOCHK has an independent dedicated division in RMD to conduct thorough and comprehensive monitoring on each obligor and group of obligors to identify and control the individual and overall credit risk in our loan portfolio.

To detect early signs of deterioration in credit status of obligors and to trigger closer monitoring to prevent further deterioration, an early alert program for potential problem customers has been established.

To ensure continuous efforts have been dedicated to resolve NPLs, BOCHK has set up internal targets to evaluate the performance in the resolution of criticised loans. RMD provides regular monitoring reports on the progress to senior management for high-level oversight.

Market Risk Management

Market risk is the risk of loss relating to the change in value of a financial instrument or a portfolio due to changes in the value of market variables, such as interest rates, foreign exchange rates and market prices will result in losses in on- and off-balance sheet positions. BOCHK's market risk arises from customer-related business and from position taking. Market risk trading positions are subject to daily mark-to-market valuation.

Market risk is managed within risk limits approved by the RMC. The overall risk limits are set into sub-limits by reference to different risk factors, which are interest rate, foreign exchange, commodity and equity prices. Considering the different nature of the products involved, limits are set by using a combination of risk measurement techniques, including position limits and sensitivity limits.

Unaudited Supplementary Financial Information (continued)

9. Risk management (continued)

Market Risk Management (continued)

Having set up the monitoring limits and supervisory procedures, the Market Risk Division in the RMD is responsible for the daily market risk management. Through the daily risk monitoring process, the Market Risk Division measures risk exposures against approved limits and initiates specific action to ensure that the overall and individual market risks are managed within an acceptable level.

Value at Risk ("VaR") is a statistical measure of the dollar amount of potential losses from adverse market movements in market rates and prices over a specified time horizon and to a given level of confidence. The VaR methodology used by BOCHK is based on a variance/covariance basis, uses historical movements in market rates and prices, a 99% confidence level and a 1-day holding period and generally takes account of correlations between different markets and rates.

At 30 June 2003, the VaR for all trading market risk exposure of BOCHK was HK$5.4 million compared with HK$3.3 million at 31 December 2002, the VaR for all trading interest rate risk exposure was HK$5.1 million (HK$2.1 million at 31 December 2002) and the VaR for all trading foreign exchange risk exposure was HK$1.1 million (HK$1.1 million at 31 December 2002). The average VaR for the first half of 2003 was HK$4.1 million, with a maximum of HK$12.6 million and a minimum of HK$1.2 million for the period.

For the first half of 2003, the average daily revenue of BOCHK earned from market risk-related trading activities was HK$2.3 million (HK$2.4 million for the first half of 2002). The standard deviation of these daily trading revenues was HK$3.2 million (HK$1.5 million for the first half of 2002). The most frequent result was daily trading revenue of between HK$1 million to HK$4 million, with 61 occurrences. The highest daily revenue was HK$11.4 million.

Foreign Exchange Risk Management

BOCHK provides foreign exchange deposit, margin trading and forward transaction services to its customers. BOCHK's trading activities in the foreign currency markets expose it to exchange rate risk. BOCHK manages exchange rate risks through its interbank market activities. In particular, BOCHK mitigates exchange rate risks by establishing position limits and limits on the loss of the whole foreign exchange trading floor. All these limits are approved by the RMC. The RMD is responsible for monitoring foreign exchange exposure and related stop-loss limits on a day-to-day basis as well as controlling BOCHK's credit risk exposure arising from foreign exchange transactions.

Interest Rate Risk Management

BOCHK's interest rate exposures comprise trading exposures and structural interest rate exposures. The major types of interest rate risk are: (1) Re-pricing risk: mismatches in the maturities or re-pricing periods of assets and liabilities; (2) Basis risk: different pricing bases for different transactions so that yield on assets and cost of liabilities may change by different amounts within the same re-pricing period.

BOCHK's ALCO maintains oversight of interest rate risk; the Risk Management Committee of the Board of Directors sanctions the interest rate risk management policies formulated by the ALCO. The Treasurer, under the supervision of the CFO, carries out approved policies and develops risk management system to identify, measure, monitor, and control interest rate risk.

Gap analysis is the primary tool used to measure BOCHK's exposure to interest rate risk. It provides BOCHK with a static view of the maturity and re-pricing characteristics of its balance sheet positions. The gap is the difference between the amount of interest-earning assets and interest-bearing liabilities that mature or must be re-priced within a specific time band. The Treasurer calculates the gaps by classifying all assets, liabilities and off-balance sheet items for each currency into appropriate time bands according to contracted maturities or anticipated re-pricing time bands. The magnitude of the gaps indicate the extent to which BOCHK is exposed to the risk of potential changes in the margins on new or re-priced assets and liabilities, and are controlled according to the gap limits approved by the Board. BOCHK uses interest rate derivatives to hedge its interest rate exposures; in most cases, plain vanilla interest rate swap is used.

Unaudited Supplementary Financial Information (continued)

9. Risk management (continued)

Interest Rate Risk Management (continued)

Sensitivity of earnings to interest rate changes is assessed through hypothetical interest rate shock of 100 basis points (on both sides) across the yield curve. This is refined using scenario analysis, based on alternative scenarios around the most likely interest rate path. Variations in net interest income are controlled within 5% of the budgeted amount for the year. Basis risk is directly related to the relative change in assets and liabilities that are indexed to the base lending rate or money market rate. The impact is gauged by the projected change in net interest income under scenarios of uncorrelated movements in rates, given the mix of pricing bases of assets and liabilities. The results of analysis are monitored by the CFO on a daily basis.

Liquidity Risk Management

Liquidity risk arises in the funding of lending, trading and investment activities and in the management of trading positions. Liquidity risk includes both the risk of unexpected increase in the cost of funding to refinance the BOCHK's asset portfolio at appropriate maturities and the risk of being unable to liquidate a position in a timely manner and/or at a reasonable price.

The goal of liquidity management is for BOCHK to be able, even under adverse market conditions, to meet all its maturing repayment obligations on time and to fund all of its investment opportunities.

BOCHK maintains flexibility in meeting its funding requirements by maintaining diverse sources of liquidity. BOCHK funds its operations principally by accepting deposits from retail and corporate depositors. BOCHK may also borrow in the short-term interbank markets, although it is typically a net lender of funds. In addition, BOCHK may from time to time raise funds through the sale of investments.

BOCHK uses the majority of funds raised to extend loans, to purchase debt securities or to conduct interbank placements. Generally deposits have a shorter average maturity than interbank placements that in turn are of shorter average maturity compared with that of loans or investments.

BOCHK maintains a buffer portfolio of liquid, high quality securities that is managed by BOCHK's Treasurer under the supervision of the CFO and the ALCO. These securities may generally be sold at any time at market prices to meet BOCHK's emergent liquidity needs. BOCHK may also manage its liquidity by borrowing in the interbank markets on a short-term basis. The interbank markets generally provide an adequate amount of liquidity, at borrowing rates that are subject to market conditions.

The primary goal of the BOCHK's asset and liability management strategy is to achieve an optimal return while ensuring adequate levels of liquidity and capital within an effective risk control framework and at reasonable cost of funding. BOCHK's ALCO is responsible for establishing these policy directives and works closely with the Treasurer to ensure that BOCHK maintains adequate levels of liquidity and secures the lowest possible cost of funding, while closely planning and monitoring BOCHK's on- and off-balance sheet assets and liabilities with regard to the risk incurred. The Treasurer adjusts, as necessary, BOCHK's liquidity and structural foreign exchange positions in line with the policies of the ALCO, and also provides reporting and analytical services to the ALCO with respect to current and planned positions taken for investment, funding and structural foreign exchange management purposes. In particular, BOCHK has implemented various measures to:

— improve its management information system to provide timely information on the movement of its liquid assets and that of its customer deposits on a daily, weekly and monthly basis;
— monitor liquidity ratios in compliance with the HKMA's requirements;
— prepare regular maturity gap analysis to enable management to review and monitor BOCHK's liquidity position on a timely basis;

Unaudited Supplementary Financial Information (continued)

9. Risk management (continued)

Liquidity Risk Management (continued)

— conduct scenario analysis to estimate the impact of various risk factors on the liquidity position;
— establish a range of liquidity risk factors for monitoring purposes and a liquidity risk warning index system to detect early signs of any irregularities; and
— create a three-tier response system to effectively deal with any emergencies.

Capital Management

The major objective of capital management is to maximise the returns to shareholders with the requirement to maintain strong capital ratio and high debt ratings. We maintain our strong capital ratio through internal capital generation, and would consider adjusting the capital mix when appropriate. The ALCO monitors the adequacy of its capital using the CAR as one of the major measurements, which is subject to the HKMA regulatory requirements. The Group maintained its capital to comply with all the statutory standards for all the periods presented in the report. On consolidated basis, BOCHK's unadjusted CAR and adjusted CAR incorporating market risk increased from 13.99% and 14.39% as at the end of last year to 14.66% and 14.87% respectively as at 30 June of this year. The main reasons were the increase in retained earnings on the one hand and decrease in loan commitments on the other. The ratios were well above the statutory minimum standards.

Operational Risk Management

Operational risk, one of the major risks exposed to BOCHK, is the risk of loss resulting from inadequate or failed internal processes, people and systems or from external events. It is BOCHK's objective to manage this risk in line with the best practice of the industry.

In order to achieve effective internal control, BOCHK is to maintain adequate documentation of its business processes and operating procedures. It also emphasises on segregation of duties and independent authorisation among all business activities.

BOCHK monitors operational risk losses and periodically collects loss data to meet the requirements of Basel Committee's New Capital Accord.

Business Continuity Plan is in place. Adequate backup facilities are maintained to support business operations in the event of disasters. In the outbreak of SARS, our contingency mechanism reacted and operated effectively. BOCHK also arranges insurance cover to mitigate potential losses in respect of operational risk.