

## 補充財務資料      Supplementary Financial Information

### 1. 資本充足比率

### 1. Capital adequacy

		二零零二年 六月三十日 As at 30 June 2002	二零零一年 十二月三十一日 As at 31 December 2001
資本充足比率	Capital adequacy ratio	<u>14.68%</u>	<u>14.38%</u>
經調整之資本充足比率	Adjusted capital adequacy ratio	<u>15.02%</u>	<u>14.57%</u>

二零零二年六月三十日及二零零一年十二月三十一日中銀香港之未經調整資本充足比率是根據《銀行業條例》附表三綜合計算之比率。

二零零二年六月三十日及二零零一年十二月三十一日中銀香港之經調整資本充足比率是根據金管局所頒佈的監管政策守則規定的「就市場風險維持充足資本」指引，計入在資產負債表日的市場風險，並與未經調整之資本充足比率相同的合併基準計算。

The capital adequacy ratio represents the consolidated ratio of BOCHK as at 30 June 2002 and 31 December 2001 computed in accordance with the Third Schedule of the Banking Ordinance.

The adjusted capital adequacy ratio represents the consolidated ratio of the BOCHK as at 30 June 2002 and 31 December 2001 computed in accordance with the guideline "Maintenance of Adequate Capital Against Market Risks" issued by the Hong Kong Monetary Authority. The adjusted ratio takes into account both credit and market risk as at 30 June 2002 and 31 December 2001.

**補充財務資料 (續)**
**Supplementary Financial Information (continued)**
**2. 扣減後的資本基礎成份**

用於計算以上二零零二年六月三十日及二零零一年十二月三十一日之資本充足比率及已匯報金管局之扣減後的綜合資本基礎分析如下：

**2. Components of capital base after deductions**

The consolidated capital base of BOCHK after deductions used in the calculation of the above capital adequacy ratios as at 30 June 2002 and 31 December 2001 and reported to the Hong Kong Monetary Authority is analysed as follows:

		二零零二年 六月三十日 As at 30 June 2002	二零零一年 十二月三十一日 As at 31 December 2001
		港幣百萬元 HK\$m	港幣百萬元 HK\$m
核心資本：	Core capital:		
繳足股款的普通股股本	Paid up ordinary share capital	43,043	43,043
儲備	Reserves	8,631	9,481
損益帳	Profit and loss account	1,610	(850)
少數股東權益	Minority interests	850	910
		<u>54,134</u>	<u>52,584</u>
附加資本：	Supplementary capital:		
一般呆帳準備金	General provisions for doubtful debts	4,990	4,943
附加資本總額	Gross value of supplementary capital	<u>4,990</u>	<u>4,943</u>
附加資本的可計算價值	Eligible value of supplementary capital	<u>4,990</u>	<u>4,943</u>
扣減前的資本基礎總額	Total capital base before deductions	<u>59,124</u>	<u>57,527</u>
扣減：	Deductions:		
持有附屬公司或 控股公司的股份	Shareholdings in subsidiaries or holding company	(360)	(375)
對有連繫公司的風險承擔	Exposures to connected companies	(230)	(347)
持有非附屬公司20%或 以上的股價	Equity investments of 20% or more in non-subsidiary companies	(221)	(256)
在其他銀行或金融機構 的股本投資	Investments in the capital of other banks or other financial institutions	(1)	(1)
		<u>(812)</u>	<u>(979)</u>
扣減後的資本基礎總額	Total capital base after deductions	<u><u>58,312</u></u>	<u><u>56,548</u></u>

補充財務資料 (續)

Supplementary Financial Information (continued)

3. 流動資金比率

3. Liquidity ratio

	截至 二零零二年 六月三十日止 六個月 6 months ended 30 June 2002	截至 二零零一年 十二月三十一日止 三個月 3 months ended 31 December 2001
平均流動資金比率— 中銀香港	41.26%	39.88%

截至二零零二年六月三十日止期間之平均流動資金比率為中銀香港在有關期間內每月之平均流動資金比率之簡單平均數。

二零零一年之平均流動資金比率為中銀香港在二零零一年十月一日(重組合併日期)至二零零一年十二月三十一日止三個月內每月之平均流動資金比率之簡單平均數。

流動資金比率是根據《銀行業條例》附表四及以單獨基準(即只包括香港辦事處)計算。

於重組合併前，各前有實體之流動資金比率是以獨自形式管理。

The average liquidity ratio for the period ended 30 June 2002 is calculated as the simple average of each calendar month's average liquidity ratio of Bank of China (Hong Kong) Limited ("BOCHK") for the period.

The average liquidity ratio for 2001 is calculated as the simple average of each calendar month's average liquidity ratio of BOCHK for the 3 months from 1 October 2001 (the date of the restructuring and merger) to 31 December 2001.

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.

Prior to the Restructuring and Merger, the liquidity ratio of each of the predecessor entities was managed on an individual basis.

## 補充財務資料 (續)

## Supplementary Financial Information (continued)

## 4. 外幣風險

下表列出因外匯自營交易、非自營交易及結構倉盤餘額而產生的主要外幣風險摘要。期權盤淨額是根據金管局「外幣持倉」申報表所載之最保守情況計算的。

## 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.

二零零二年六月三十日

As at 30 June 2002

		港幣百萬元等值						
		Equivalent in millions of HK\$						
		新西蘭元						
		美元	英鎊	New	澳元	日元	其他貨幣	合計
		US	Pound	Zealand	Australian	Japanese	其他貨幣	合計
		Dollars	Sterling	Dollars	Dollars	Yen	Others	Total
現貨資產	Spot assets	181,434	11,806	8,418	25,671	13,465	22,076	262,870
現貨負債	Spot liabilities	(134,844)	(17,922)	(15,035)	(26,722)	(2,953)	(19,567)	(217,043)
遠期買入	Forward purchases	109,340	11,365	8,528	8,142	17,557	18,990	173,922
遠期賣出	Forward sales	(145,155)	(5,229)	(1,924)	(7,111)	(28,095)	(21,375)	(208,889)
期權盤淨額	Net options position	446	7	143	146	—	39	781
長/(短)盤淨額	Net long/(short) position	11,221	27	130	126	(26)	163	11,641

補充財務資料 (續)

Supplementary Financial Information (continued)

4. 外幣風險 (續)

4. Currency concentrations (continued)

二零零一年十二月三十一日

As at 31 December 2001

		港幣百萬元等值 Equivalent in millions of HK\$						
		新西蘭元						
		美元	英鎊	New Zealand	澳元	日元	其他貨幣	合計
		US Dollars	Pound Sterling	Zealand Dollars	Australian Dollars	Japanese Yen	Others	Total
現貨資產	Spot assets	197,497	15,996	14,167	28,316	3,428	22,113	281,517
現貨負債	Spot liabilities	(134,348)	(17,971)	(14,550)	(27,380)	(2,081)	(18,859)	(215,189)
遠期買入	Forward purchases	70,500	5,230	1,211	1,623	10,834	12,726	102,124
遠期賣出	Forward sales	(124,606)	(3,233)	(794)	(2,538)	(12,190)	(15,807)	(159,168)
期權盤淨額	Net options position	4,277	14	43	135	(7)	22	4,484
長/(短)盤淨額	Net long/(short) position	13,320	36	77	156	(16)	195	13,768

於二零零二年六月三十日及二零零一年十二月三十一日，本集團並沒有重大結構倉盤淨額。

There were no significant net structural positions for the Group as at 30 June 2002 and 31 December 2001.

## 補充財務資料 (續)

## Supplementary Financial Information (continued)

## 5. 分類資料

## 5. Segmental information

 (a) 按行業分類客戶貸款  
總額

## (a) Gross advances to customers by industry sector

		二零零二年 六月三十日 As at 30 June 2002 港幣百萬元 HK\$m	二零零一年 十二月三十一日 As at 31 December 2001 港幣百萬元 HK\$m
在香港使用的貸款	Loans for use in Hong Kong		
工商金融業	Industrial, commercial and financial		
— 物業發展	- Property development	26,818	28,300
— 物業投資	- Property investment	44,814	47,758
— 金融企業	- Financial concerns	6,691	7,314
— 股票經紀	- Stockbrokers	81	108
— 批發及零售業	- Wholesale and retail trade	22,419	24,091
— 製造業	- Manufacturing	11,140	11,477
— 運輸及運輸設備	- Transport and transport equipment	9,780	8,778
— 其他	- Others	51,487	51,054
個人	Individuals		
— 購買「居者有其屋 計劃」、「私人參 建居屋計劃」和 「租者置其屋計 劃」樓宇的貸款	- Loans for the purchase of flats in Home Ownership Scheme, Private Sector Participation Scheme and Tenants Purchase Scheme	20,032	20,273
— 購買其他住宅 物業的貸款	- Loans for purchase of other residential properties	85,689	82,513
— 信用咭貸款	- Credit card advances	3,462	3,019
— 其他	- Others	9,280	9,735
在香港使用的 貸款總額	Total loans for use in Hong Kong	291,693	294,420
貿易融資	Trade finance	9,763	10,566
在香港以外使用 的貸款	Loans for use outside Hong Kong	16,178	18,052
客戶貸款總額	Total advances to customers	317,634	323,038

補充財務資料 (續)

Supplementary Financial Information (continued)

5. 分類資料 (續)

5. Segmental information (continued)

(b) 按地理區域分類之客戶貸款、逾期貸款及不履約貸款

下列關於客戶貸款總額、逾期超過三個月之貸款及不履約貸款之地理區域分析是根據交易對手的所在地，並已顧及有關貸款之轉移風險因素。

(i) 客戶貸款總額

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

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

(i) Gross advances to customers

		二零零二年 六月三十日 As at 30 June 2002 港幣百萬元 HK\$m	二零零一年 十二月三十一日 As at 31 December 2001 港幣百萬元 HK\$m
香港	Hong Kong	305,892	310,953
中國內地	Mainland China	6,348	7,753
其他	Others	5,394	4,332
		<u>317,634</u>	<u>323,038</u>

補充財務資料 (續)

Supplementary Financial Information (continued)

5. 分類資料 (續)

5. Segmental information (continued)

(b) 按地理區域分類之客戶貸款、逾期貸款及不履約貸款 (續)

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

(ii) 逾期超過三個月之貸款

(ii) Overdue advances for over three months

		二零零二年 六月三十日 As at 30 June 2002 港幣百萬元 HK\$m	二零零一年 十二月三十一日 As at 31 December 2001 港幣百萬元 HK\$m
香港	Hong Kong	19,296	21,713
中國內地	Mainland China	2,294	3,465
其他	Others	137	120
		<u>21,727</u>	<u>25,298</u>

(iii) 不履約貸款

(iii) Non-performing loans

		二零零二年 六月三十日 As at 30 June 2002 港幣百萬元 HK\$m	二零零一年 十二月三十一日 As at 31 December 2001 港幣百萬元 HK\$m
香港	Hong Kong	25,821	30,043
中國內地	Mainland China	2,483	5,130
其他	Others	194	339
		<u>28,498</u>	<u>35,512</u>



補充財務資料 (續)

Supplementary Financial Information (continued)

6. 跨境債權

跨境債權的資料顯示對海外交易方的最終風險的地區分佈，並在計入任何風險轉移後按照交易方所在地計算。一般而言，假如債務的擔保人所處國家與借貸人不同，或債務由某銀行的海外分行作出而其總公司位處另一國家，則會確認跨境債權風險的轉移。佔總跨境債權10%或以上的地區方作分析及披露如下：

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:

		銀行及 金融機構 Banks and other financial institutions	公共機構 Public sector entities	其他 Others	合計 Total
		港幣百萬元 HK\$m	港幣百萬元 HK\$m	港幣百萬元 HK\$m	港幣百萬元 HK\$m
於二零零二年六月三十日	As at 30 June 2002				
亞洲，不包括 香港	Asia, other than Hong Kong	65,728	7,555	9,749	83,032
北美洲	North America	23,323	27,443	16,771	67,537
西歐	Western Europe	152,709	3,587	20,049	176,345
加勒比海國家	Caribbean	—	—	2,545	2,545
		<u>241,760</u>	<u>38,585</u>	<u>49,114</u>	<u>329,459</u>

補充財務資料 (續)

Supplementary Financial Information (continued)

6. 跨境債權 (續)

6. Cross-border claims (continued)

		銀行及 金融機構 Banks and other financial institutions	公共機構 Public sector entities	其他 Others	合計 Total
		港幣百萬元 HK\$m	港幣百萬元 HK\$m	港幣百萬元 HK\$m	港幣百萬元 HK\$m
於二零零一年 十二月三十一日	As at 31 December 2001				
亞洲，不包括 香港	Asia, other than Hong Kong	133,805	15,771	10,337	159,913
北美洲	North America	34,303	18,526	8,725	61,554
西歐	Western Europe	143,297	3,172	3,934	150,403
加勒比海國家	Caribbean	—	—	3,105	3,105
		<u>311,405</u>	<u>37,469</u>	<u>26,101</u>	<u>374,975</u>

補充財務資料 (續)

Supplementary Financial Information (continued)

7. 逾期及經重組資產

7. Overdue and rescheduled assets

(a) 客戶貸款

(a) Advances to customers

(i) 已逾期之總客戶  
貸款

(i) Gross amount of overdue advances

	二零零二年 六月三十日 As at 30 June 2002 港幣百萬元 HK\$m	佔客戶貸款 總額百分比 % of gross advances to customers	二零零一年 十二月三十一日 As at 31 December 2001 港幣百萬元 HK\$m	佔客戶貸款 總額百分比 % of gross advances to customers
客戶貸款總額				
已逾期：				
— 超過三個月 但不超過 六個月	2,455	0.77%	4,212	1.30%
— 超過六個月 但不超過一年	5,770	1.82%	5,427	1.68%
— 超過一年	13,502	4.25%	15,659	4.85%
	<u>21,727</u>	<u>6.84%</u>	<u>25,298</u>	<u>7.83%</u>

於二零零二年六月三十日及二零零一年十二月三十一日，沒有逾期超過三個月之銀行及其他金融機構貸款。

At 30 June 2002 and 31 December 2001, there were no advances to banks and other financial institutions which were overdue for over three months.

補充財務資料 (續)

Supplementary Financial Information (continued)

7. 逾期及經重組資產 (續)

7. Overdue and rescheduled assets (continued)

(a) 客戶貸款 (續)

(a) Advances to customers (continued)

(ii) 逾期貸款與不履  
約貸款：

(ii) Overdue advances are reconciled to non-performing loans as follows:

		二零零二年 六月三十日 As at 30 June 2002 港幣百萬元 HK\$m	二零零一年 十二月三十一日 As at 31 December 2001 港幣百萬元 HK\$m
逾期超過三個月 之貸款	Advances which are overdue for more than three months	21,727	25,298
加：逾期三個月或 以下已停止 累計利息 之貸款 - 包括在經重 組之貸款內 - 其他	Add: non-accrual advances which are overdue for three months or less  - included in rescheduled advances - others	   1,480 6,152	   1,315 10,685
減：逾期超過三個月 並仍累計利息 之貸款	Less: advances which are overdue for more than three months and on which interest is still being accrued	   (861)	   (1,786)
不履約貸款	Non-performing loans	<u>28,498</u>	<u>35,512</u>

補充財務資料 (續)

Supplementary Financial Information (continued)

7. 逾期及經重組資產 (續)

7. Overdue and rescheduled assets (continued)

(a) 客戶貸款 (續)

(a) Advances to customers (continued)

(iii) 經重組貸款 (已扣除上述細項(i)逾期超過三個月之貸款)如下:

(iii) Rescheduled advances (net of amounts included in overdue advances for more than three months and reported in item (i) above) are as follows:

	二零零二年		二零零一年		
	六月三十日	佔客戶貸款 總額百分比	十二月三十一日	佔客戶貸款 總額百分比	
	As at	% of gross	As at	% of gross	
	30 June	advances to	31 December	advances to	
	2002	customers	2001	customers	
	港幣百萬元		港幣百萬元		
	HK\$m		HK\$m		
經重組貸款	Rescheduled				
	advances	1,617	0.51%	1,814	0.56%

於二零零二年六月三十日及二零零一年十二月三十一日，沒有經重組之銀行及其他金融機構貸款。

At 30 June 2002 and 31 December 2001, there were no rescheduled advances to banks and other financial institutions.

(b) 其他逾期資產

(b) Other overdue assets

	二零零二年		二零零一年	
	六月三十日	佔客戶貸款 總額百分比	十二月三十一日	佔客戶貸款 總額百分比
	As at	% of gross	As at	% of gross
	30 June	advances to	31 December	advances to
	2002	customers	2001	customers
	港幣百萬元		港幣百萬元	
	HK\$m		HK\$m	
已逾期:	Overdue for:			
— 超過三個月	- six months or less			
但不超過六個月	but over three months	10	9	
— 超過六個月	- one year or less			
但不超過一年	but over six months	21	5	
— 超過一年	- over one year	19	4	
		<u>50</u>	<u>18</u>	

補充財務資料 (續)

Supplementary Financial Information (continued)

8. 風險管理

中銀香港風險管理的目標是將風險控制在可接受的水平的前題下，獲取長期的經風險調節後的資本回報的最大化和股東價值最大化。為保證風險管理目標的實現，我們採取如下措施：

- 建立了更加獨立、集中、全面的風險管理體系。該體系注重建立良好公司治理機制，強調股東利益最大化，平衡收益與可接受風險；
- 實行嚴格的風險管理問責制；
- 採用國際銀行風險管理的原則和最佳做法；
- 完善風險管理信息系統、風險衡量技術及風險監控手段；
- 注重改善風險管理文化。

中銀香港已制定並實施一套全面的風險管理政策與程序，以識別、衡量、監察及控制全行的信貸風險、市場風險、流動性風險和操作風險。董事會屬下的風險管理委員會負責審批風險政策及程序。

8. Risk management

BOCHK's goal in risk management is to maximise its long-term risk-adjusted return on capital as well as shareholders' wealth while maintaining its risk exposure within acceptable parameters. Our risk management philosophy seeks to achieve our goal by:

- establishing a more independent, centralised and comprehensive risk management system, which stresses on standardising corporate governance structure, maximising shareholders' value and balancing the risk and return level;
- emphasising the importance of risk control responsibility and accountability;
- adopting international risk management principles and best practices;
- improving our management information systems, risk measurement techniques and risk monitoring controls; and
- modernising our risk management culture on a continuous basis.

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 Risk Management Committee under the Board of Directors has the responsibility of approving risk management policies and procedures.

補充財務資料 (續)

Supplementary Financial Information (continued)

8. 風險管理 (續)

中銀香港設立風險管理總監管理風險管理部，直接向董事會風險管理委員會負責，協助總裁組織全行授信風險、市場風險和操作風險的管理工作，並就三類風險的管理狀況，每月向董事會風險管理委員會提出獨立報告。此外，中銀香港設立首席財務官，在司庫的協助下監控全行的利率風險和流動性風險，並定期向資產負債管理委員會報告。

中銀香港的主要附屬銀行—南商、集友銀行有限公司(「集友」)亦面臨同樣的業務風險，它們遵循本公司的風險管理策略和政策。此外，南商、集友已實施一套與中銀香港風險管理控制及程序一致之風險管理控制及程序。在一般風險管理範疇內，南商和集友可以根據各自的實際情況實施現有的風險管理制度。

8. Risk management (continued)

Our Chief Risk Officer oversees and monitors the operations of the risk management department (“RMD”) and reports directly to the Risk Management Committee. The Chief Risk Officer is also responsible for assisting the Chief Executive on bank-wide credit risk, market risk and operational risk management and submitting to the Risk Management Committee the independent risk management report each month. In addition, our Chief Financial Officer, with assistance of the Treasurer, monitors the bank-wide interest rate risk and liquidity risk and submits reports to the Asset and Liability Management Committee (“ALCO”) on a regular basis.

BOCHK’s principal banking subsidiaries, Nanyang and Chiyu Banking Corporation Limited (“Chiyu”), also face the same types of inherent business risks and they generally follow our risk management strategies and policies. In addition, Nanyang and Chiyu have generally implemented risk management controls and procedures that are in compliance with the risk management controls and procedures of BOCHK. Within this general risk management framework, Nanyang and Chiyu may conduct their existing risk management practices according to their own specific circumstances.

補充財務資料 (續)

Supplementary Financial Information (*continued*)

8. 風險管理 (續)

信貸風險管理

信貸風險指客戶或交易對手不能或不願履行其已與中銀香港達成的承諾的風險。信貸風險主要來自貸款、貿易融資及財資業務。

中銀香港相信，獨立、恰當的平衡制約體系是有效風險管理的關鍵。為此，在中銀香港的組織管理架構中，風險管理部和稽核部分別直接向風險管理委員會及稽核委員會報告，形成獨立監察機制。

為避免潛在利益衝突，中銀香港信貸審核單位獨立於業務單位。中銀香港的信貸評估強調全面了解貸款目的、貸款結構、借款人的財政狀況、現金流量狀況、還款能力以及經營管理能力。

中銀香港在銀行內部採取多層次參與更加謹慎地監察信貸風險，及早發現關注戶可能降級的先兆，以採取必要措施。為了提高信貸資產質量，控制並降低不良貸款比率，中銀香港制定明確的指標和激勵計劃，以考核前線業務單位及特殊資產管理部的表現。

8. Risk management (*continued*)

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 considers that independence and proper checks-and-balances are of critical importance in carrying out effective risk management. To this purpose, BOCHK's managerial/organisational structure placed our RMD and Audit Department in a hierarchical position in which they report directly to the Risk Management Committee and Audit Committee respectively. These committees and departments form an independent line of control.

To avoid any potential conflicts of interest, the credit review functions are independent of the business development units. 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 exercises credit risk monitoring in a prudent manner with the involvement of multiple levels within our organisation. This process enables BOCHK to promptly detect any early signs of loan deterioration and identifies potential loan classification downgrades so that the appropriate actions can be taken to manage the loans. To improve the credit quality and control the non-performing loan ratio, BOCHK establishes a clear target to evaluate the performance of the credit initiation units and the Special Asset Management Department.



補充財務資料 (續)

Supplementary Financial Information (continued)

8. 風險管理 (續)

市場風險管理

市場風險是指因為利率或市價波動導致資產負債表以內及以外持倉之虧損的風險。本行的市場風險包括來自客戶業務及自營持倉。與市場風險有關的自營持倉每日均會按市值計價基準評估。

市場風險透過由風險管理委員會批核的風險限額進行管理。整體風險限額參照不同的風險因素，例如利率、匯率、商品及股票價格，細分為更具體的限額。在考慮有關產品的不同性質後，採用多種風險計算技術，包括持倉限額及敏感度限額，制定具體限額。

風險管理部設市場風險管理處，負責日常市場風險管理。該處透過每日監察程序，計算實際風險水平與經核准風險限額的差距，並提出具體措施，以確保整體和個別的市場風險均限制在可接受水平之內。

「涉險值」是一種統計學方式，用以在一段特定時間內，按指定的置信度，估計由於匯率、利率、商品及股票價格波動而可能對風險持倉所造成的潛在損失。中銀香港以方差／共變方差基準方法，計算投資組合及個別「涉險值」，並採用了市場利率及價格的歷史變動、99%置信水平及一天持有期等之基準，並通常考慮不同市場及價格的互相影響關係。

8. Risk management (continued)

Market risk management

Market risk is the risk that the movements in interest rates or 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 Risk Management Committee. 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.

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 technique which estimates the potential losses that could occur on risk positions taken due to movements in foreign exchange, interest rates, commodity and equity prices over a specified time horizon and to a given level of confidence. The model used by BOCHK to calculate portfolio and individual VaR 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.

補充財務資料 (續)

Supplementary Financial Information (*continued*)

8. 風險管理 (續)

二零零二年六月三十日，中銀香港所有自營市場風險持倉的涉險值為6,500,000港元(二零零一年十二月三十一日之數值為1,600,000港元)，所有自營利率風險持倉的涉險值為7,800,000港元(二零零一年十二月三十一日為1,500,000港元)，而所有自營匯率風險持倉的涉險值為900,000港元(二零零一年十二月三十一日為1,200,000港元)。二零零二年上半年內平均涉險值為2,500,000港元。

中銀香港在重組及合併前，中銀集團各成員銀行各自管理市場風險，故此二零零一年度上半年中銀集團的自營市場風險平均涉險值與中銀香港二零零二年度同期無可比較性，故未有顯示有關數據。

**外匯風險管理**

中銀香港向客戶提供外幣存款、孖展買賣及遠期交易等服務。中銀香港在外幣市場上的交易活動令其須承擔匯率風險。中銀香港透過同業市場活動管理匯率風險。其中中銀香港透過設定持倉限額及整體外匯交易虧損限額，減低外匯風險。所有限額均經風險管理委員會審批。風險管理部負責每日監察外匯風險及其停止虧損之限額，並控制中銀香港在外匯交易產生的信貸風險。

8. Risk management (*continued*)

The VaR for all trading market risk exposure of BOCHK at 30 June 2002 was HK\$6.5 million (HK\$1.6 million at 31 December 2001), the VaR for all trading interest rate risk exposure was HK\$7.8 million (HK\$1.5 million at 31 December 2001) and the VaR for all trading foreign exchange risk exposure was HK\$0.9 million (HK\$1.2 million at 31 December 2001). The average VaR for the period ended 30 June 2002 was HK\$2.5 million.

Prior to the restructuring and merger, market risk of each of the predecessor entities was managed on an individual basis. As a result, the average VaR from market risk-related trading activities of BOCHK for the period ended 30 June 2001 is not comparable and hence not presented.

**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 Risk Management Committee. 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.

補充財務資料 (續)

Supplementary Financial Information (continued)

8. 風險管理 (續)

利率風險管理

中銀香港的資產負債表主要包括以港元為單位的利率敏感資產及負債。中銀香港的利率風險主要來自此等資產及負債到期日或重訂價格期限的錯配，以及利率波動風險。此外，不同交易的不同定價基準亦可能令中銀香港的資產和負債在同一重訂價格期間產生利率風險。

中銀香港司庫負責制訂利率風險管理政策及發展風險管理系統以協助中銀香港的資產負債管理委員會確定、量度、監察及控制利率風險。司庫利用差距分析量度在每段到期日子或必須重訂價格的日子內之計息資產與計息負債差額，以反映在指定的日期之資產負債表所含利率敏感缺口特性。司庫以分貨幣形式將中銀香港所有資產、負債及表外項目，根據合約到期日或預計重訂價格日期，分別排入對應的時段類別，計算在每個時段內到期或重訂價格的資產負債金額之差異，以顯示中銀香港在新訂或重訂價格的資產和負債息差方面的潛在變動風險。利率敏感缺口所帶來的潛在風險可利用模擬利率的變化以測試缺口對利差的影響幅度是否可以控制，有關的結果均反映在每天的報告內。

8. Risk management (continued)

Interest rate risk management

BOCHK's balance sheet consists predominantly of Hong Kong dollar denominated interest rate sensitive assets and liabilities. BOCHK's primary sources of interest rate risk are mismatches in the maturities or re-pricing periods of these assets and liabilities and movements in interest rates. In addition, different pricing bases for different transactions may also lead to interest rate risk for BOCHK's assets and liabilities within the same re-pricing period.

BOCHK's Treasurer is responsible for formulating the policy and developing risk management system to assist BOCHK's ALCO in identifying, measuring, monitoring and controlling interest rate risk. The Treasurer uses gap analysis to measure BOCHK's exposure to interest rate risk. 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. It provides BOCHK with a static view of the maturity and re-pricing characteristics of its balance sheet positions. The Treasurer measures 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 to 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. The potential risks associated with these gaps are measured through simulated interest rate scenarios to testify that the interest income variations are within the manageable range and the results are reflected on daily reports.

補充財務資料 (續)

Supplementary Financial Information (continued)

8. 風險管理 (續)

流動風險管理

流動資金風險來自借貸、自營交易及投資活動，以及管理自營交易持倉時而產生。流動性風險包括在到期日因受不能預計的資金成本上升而令中銀香港資產組合出現再融資的風險，和未能及時及／或按合理價格變現某類持倉產生的風險。流動資金管理的目標是令中銀香港能夠按時應付其所有到期債務(即使在惡劣市況下)和為其投資機會提供資金。

中銀香港有多元化的流動資金來源，以靈活地滿足其融資需求。中銀香港業務的資金主要來自零售及公司客戶的存款。雖然中銀香港主要為資金貸放者，但中銀香港亦會在同業市場上借入短期資金。此外，中銀香港亦會不時透過出售投資籌集資金。

中銀香港將所得資金大部份用於放貸、投資債券或作同業拆放。一般而言，接受存款的平均到期日較貸款或投資的期限為短，並較同業拆放的平均到期日為長。

中銀香港有高度流動及高質素證券緩衝組合，並由中銀香港司庫管理。這些證券一般可按市場價格隨時售出，以配合緊急出現的資金需求。中銀香港亦可透過同業市場短期拆借管理其流動資金。同業市場一般可按市況調整的利率提供足夠的流動資金。

8. Risk management (continued)

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 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, make investments in debt securities or conduct interbank placements. Generally, deposits are of shorter average maturity than that of loans or investments and are of longer average maturity compared with interbank placements.

BOCHK maintains a buffer portfolio of liquid, high quality securities that is managed by BOCHK's Treasurer. 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.

補充財務資料 (續)

Supplementary Financial Information (continued)

8. 風險管理 (續)

中銀香港資產負債管理策略的主要目標是要保持足夠的流動性和資本金水平，在有效的風險管理機制內及合理的融資成本要求，爭取最大回報。中銀香港的資產負債管理委員會負責制定政策方針並透過司庫的職責確保中銀香港有足夠的流動資金及能取得最低融資成本，同時緊密策劃及監察中銀香港的資產負債表內外持倉量所衍生的風險。中銀香港司庫會按情況調整銀行的流動資金及外匯管理盤的持倉水平，以配合資產負債管理委員會政策，並就投資、融資和外匯管理盤的現有水平和預計變化，向資產負債管理委員會匯報和分析。針對流動管理，中銀香港已實施各項措施以：

- 改善其管理資訊系統，分別在每日、每周及每月提供有關流動資產變動及客戶存款變動的最新資料；
- 監察流動比率，以符合香港金融管理局的規定；
- 定期編製到期差距分析，協助管理層及時檢討和監察中銀香港的流動資金狀況；

8. Risk management (continued)

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 according to the risk incurred. The Treasurer adjusts, as necessary, BOCHK's liquidity and foreign exchange positions in line with the policies of ALCO, and also provides reporting and analytical services to ALCO with respect to current and planned positions taken for investment, funding and 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 analyses to enable management to review and monitor BOCHK's liquidity position on a timely basis;

補充財務資料 (續)

Supplementary Financial Information (*continued*)

8. 風險管理 (續)

- 進行處境分析，以評估不同風險因素對流動資金狀況的影響；
- 設定須受監察的一系列流動性風險因素和流動性風險預警系統，為不尋常情況作出預警報告；及
- 設立三級應變機制，更有效處理緊急事件。

資本管理

本集團採用資本充足比率(「CAR」)作為主要量度標準以監控本身資本的充足性，並須符合香港金管局的法定要求。在報表披露的經營期間，集團須維持資本水平以符合各項法定要求。按合併基礎計算，未經調整的資本充足比率為14.68%；而經調整了市場風險的資本充足比率為15.02%。兩項比率均較法定最低要求為高。與上年底比較，未經調整及經調整後的比率分別有0.30%及0.45%的增加。

8. 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 to be monitored 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 Group monitors the adequacy of its capital using the Capital Adequacy Ratio (“CAR”) as one of the major measurements, which is subject to the Hong Kong Monetary Authority 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 were improved from 14.38% and 14.57% as at the end of last year to 14.68% and 15.02% respectively. Both were well above the statutory minimum standards.

補充財務資料 (續)

Supplementary Financial Information (*continued*)

8. 風險管理 (續)

操作風險管理

操作風險涉及因操作流程不完善、人為過失、電腦系統故障或外部突發事件等因素造成的經濟損失。此類風險存在於各項業務及後勤活動中，是中銀香港面對的主要風險之一。

中銀香港主要透過內部控制制度管理操作風險，以確保所有運作有效執行。同時，中銀香港現正完善應變方案，以令一旦出現災難性事故時，本行的關鍵業務功能可於短時間內恢復，減低對客戶造成之影響。

中銀香港將進一步改善識別、衡量、監督及控制操作風險的管理方法，以達至國際水平。

8. Risk management (*continued*)

Operational risk management

Operational risk is the risk of loss resulting from inadequate or failed internal processes, people and systems or from external events. It is one of the major risks to which BOCHK is exposed and is inherent to various businesses and back office processing.

BOCHK manages operational risk mainly through its internal controls to ensure all operations are conducted effectively. At the same time, BOCHK is enhancing its business continuity plan to ensure that the operation of critical functions can recover within a short time frame and minimise the impact to customers in the event of a disaster.

To be in line with international best practices, BOCHK will further enhance the methodologies in identifying, measuring, monitoring and controlling operational risk.