

补充财务资料

Supplementary Financial Information

1. 资本充足比率

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
资本充足比率	Capital adequacy ratio	14.68%	14.38%
经调整之资本充足比率	Adjusted capital adequacy ratio	15.02%	14.57%

二零零二年六月三十日及二零零一年十二月三十一日中银香港之未经调整资本充足比率是根据《银行业条例》附表三综合计算之比率。

二零零二年六月三十日及二零零一年十二月三十一日中银香港之经调整资本充足比率是根据金管局所颁布的监管政策守则规定的「就市场风险维持充足资本」指引，计入在资产负债表日的市场风险，并与未经调整之资本充足比率相同的合并基准计算。

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.

补充财务资料 (续)

Supplementary Financial Information (continued)

2. 扣减后的资本基础成份

用于计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资本充足比率及已汇报金管局之扣减后的综合资本基础分析如下：

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 港币百万元 HK\$m	二零零一年 十二月三十一日 As at 31 December 2001 港币百万元 HK\$m
核心资本：	Core capital:		
缴足股款的普通股股本	Paid up ordinary share capital	43,043	43,043
储备	Reserves	8,631	9,481
损益帐	Profit and loss account	1,610	(850)
少数股东权益	Minority interests	850	910
		<u>54,134</u>	<u>52,584</u>
附加资本：	Supplementary capital:		
一般呆帐准备金	General provisions for doubtful debts	4,990	4,943
附加资本总额	Gross value of supplementary capital	<u>4,990</u>	<u>4,943</u>
附加资本的可计算价值	Eligible value of supplementary capital	<u>4,990</u>	<u>4,943</u>
扣减前的资本基础总额	Total capital base before deductions	<u>59,124</u>	<u>57,527</u>
扣减：	Deductions:		
持有附属公司或控股公司的股份	Shareholdings in subsidiaries or holding company	(360)	(375)
对有连系公司的风险承担	Exposures to connected companies	(230)	(347)
持有非附属公司20%或以上的股价	Equity investments of 20% or more in non-subsidiary companies	(221)	(256)
在其他银行或金融机构的股本投资	Investments in the capital of other banks or other financial institutions	(1)	(1)
		<u>(812)</u>	<u>(979)</u>
扣减后的资本基础总额	Total capital base after deductions	<u><u>58,312</u></u>	<u><u>56,548</u></u>

补充财务资料 (续)

Supplementary Financial Information (continued)

3. 流动资金比率

3. Liquidity ratio

	截至 二零零二年 六月三十日止 六个月 6 months ended 30 June 2002	截至 二零零一年 十二月三十一日止 三个月 3 months ended 31 December 2001
平均流动资金比率— 中银香港	41.26%	39.88%

截至二零零二年六月三十日止期间之平均流动资金比率为中银香港在有关期间内每月之平均流动资金比率之简单平均数。

二零零一年之平均流动资金比率为中银香港在二零零一年十月一日(重组合并日期)至二零零一年十二月三十一日止三个月内每月之平均流动资金比率之简单平均数。

流动资金比率是根据《银行业条例》附表四及以单独基准(即只包括香港办事处)计算。

于重组合并前,各前有实体之流动资金比率是以独自形式管理。

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.

补充财务资料 (续)

Supplementary Financial Information (continued)

4. 外币风险

下表列出因外汇自营交易、非自营交易及结构仓盘余额而产生的主要外币风险摘要。期权盘净额是根据金管局「外币持仓」申报表所载之最保守情况计算的。

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

		港币百万元等值						
		Equivalent in millions of HK\$						
		新西兰元						
		美元	英镑	New	澳元	日元	其他货币	合计
		US	Pound	Zealand	Australian	Japanese	其他货币	合计
		Dollars	Sterling	Dollars	Dollars	Yen	Others	Total
现货资产	Spot assets	181,434	11,806	8,418	25,671	13,465	22,076	262,870
现货负债	Spot liabilities	(134,844)	(17,922)	(15,035)	(26,722)	(2,953)	(19,567)	(217,043)
远期买入	Forward purchases	109,340	11,365	8,528	8,142	17,557	18,990	173,922
远期卖出	Forward sales	(145,155)	(5,229)	(1,924)	(7,111)	(28,095)	(21,375)	(208,889)
期权盘净额	Net options position	446	7	143	146	—	39	781
长/ (短) 盘净额	Net long/(short) position	11,221	27	130	126	(26)	163	11,641

补充财务资料 (续)

Supplementary Financial Information (continued)

4. 外币风险 (续)

4. Currency concentrations (continued)

二零零一年十二月三十一日

As at 31 December 2001

		港币百万元等值						
		Equivalent in millions of HK\$						
		新西兰元						
		美元	英镑	New	澳元	日元	其他货币	合计
		US	Pound	Zealand	Australian	Japanese	其他货币	合计
		Dollars	Sterling	Dollars	Dollars	Yen	Others	Total
现货资产	Spot assets	197,497	15,996	14,167	28,316	3,428	22,113	281,517
现货负债	Spot liabilities	(134,348)	(17,971)	(14,550)	(27,380)	(2,081)	(18,859)	(215,189)
远期买入	Forward purchases	70,500	5,230	1,211	1,623	10,834	12,726	102,124
远期卖出	Forward sales	(124,606)	(3,233)	(794)	(2,538)	(12,190)	(15,807)	(159,168)
期权盘净额	Net options position	4,277	14	43	135	(7)	22	4,484
长/(短)盘净额	Net long/(short)							
	position	13,320	36	77	156	(16)	195	13,768

于二零零二年六月三十日及二零零一年十二月三十一日，本集团并没有重大结构仓盘净额。

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

补充财务资料 (续)

Supplementary Financial Information (continued)

5. 分类资料

5. Segmental information

 (a) 按行业分类客户贷款
总额

(a) Gross advances to customers by industry sector

		二零零二年 六月三十日 As at 30 June 2002 港币百万元 HK\$m	二零零一年 十二月三十一日 As at 31 December 2001 港币百万元 HK\$m
在香港使用的贷款	Loans for use in Hong Kong		
工商金融业	Industrial, commercial and financial		
— 物业发展	- Property development	26,818	28,300
— 物业投资	- Property investment	44,814	47,758
— 金融企业	- Financial concerns	6,691	7,314
— 股票经纪	- Stockbrokers	81	108
— 批发及零售业	- Wholesale and retail trade	22,419	24,091
— 制造业	- Manufacturing	11,140	11,477
— 运输及运输设备	- Transport and transport equipment	9,780	8,778
— 其他	- Others	51,487	51,054
个人	Individuals		
— 购买「居者有其屋 计划」、「私人参 建居屋计划」和 「租者置其屋计 划」楼宇的贷款	- Loans for the purchase of flats in Home Ownership Scheme, Private Sector Participation Scheme and Tenants Purchase Scheme	20,032	20,273
— 购买其他住宅 物业的贷款	- Loans for purchase of other residential properties	85,689	82,513
— 信用咭贷款	- Credit card advances	3,462	3,019
— 其他	- Others	9,280	9,735
在香港使用的 贷款总额	Total loans for use in Hong Kong	291,693	294,420
贸易融资	Trade finance	9,763	10,566
在香港以外使用 的贷款	Loans for use outside Hong Kong	16,178	18,052
客户贷款总额	Total advances to customers	317,634	323,038

补充财务资料 (续)

Supplementary Financial Information (*continued*)

5. 分类资料 (续)

5. Segmental information (*continued*)

(b) 按地理区域分类之客户贷款、逾期贷款及不履约贷款

下列关于客户贷款总额、逾期超过三个月之贷款及不履约贷款之地理区域分析是根据交易对手的所在地，并已顾及有关贷款之转移风险因素。

(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) 客户贷款总额

(i) Gross advances to customers

		二零零二年 六月三十日 As at 30 June 2002 港币百万元 HK\$'m	二零零一年 十二月三十一日 As at 31 December 2001 港币百万元 HK\$'m
香港	Hong Kong	305,892	310,953
中国内地	Mainland China	6,348	7,753
其他	Others	5,394	4,332
		<u>317,634</u>	<u>323,038</u>

补充财务资料 (续)

Supplementary Financial Information (continued)

5. 分类资料 (续)

5. Segmental information (continued)

(b) 按地理区域分类之客户贷款、逾期贷款及不履约贷款 (续)

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

(ii) 逾期超过三个月之贷款

(ii) Overdue advances for over three months

		二零零二年 六月三十日 As at 30 June 2002 港币百万元 HK\$m	二零零一年 十二月三十一日 As at 31 December 2001 港币百万元 HK\$m
香港	Hong Kong	19,296	21,713
中国内地	Mainland China	2,294	3,465
其他	Others	137	120
		<u>21,727</u>	<u>25,298</u>

(iii) 不履约贷款

(iii) Non-performing loans

		二零零二年 六月三十日 As at 30 June 2002 港币百万元 HK\$m	二零零一年 十二月三十一日 As at 31 December 2001 港币百万元 HK\$m
香港	Hong Kong	25,821	30,043
中国内地	Mainland China	2,483	5,130
其他	Others	194	339
		<u>28,498</u>	<u>35,512</u>

补充财务资料 (续)

Supplementary Financial Information (continued)

6. 跨境债权

跨境债权的资料显示对海外交易方的最终风险的地区分布，并在计入任何风险转移后按照交易方所在地计算。一般而言，假如债务的担保人所处国家与借贷人不同，或债务由某银行的海外分行作出而其总公司位处另一国家，则会确认跨境债权风险的转移。占总跨境债权10%或以上的地区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:

		银行及 金融机构 Banks and other financial institutions	公共机构 Public sector entities	其他 Others	合计 Total
		港币百万元 HK\$m	港币百万元 HK\$m	港币百万元 HK\$m	港币百万元 HK\$m
于二零零二年六月三十日	As at 30 June 2002				
亚洲，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
西欧	Western Europe	152,709	3,587	20,049	176,345
加勒比海国家	Caribbean	—	—	2,545	2,545
		<u>241,760</u>	<u>38,585</u>	<u>49,114</u>	<u>329,459</u>

补充财务资料 (续)

Supplementary Financial Information (continued)

6. 跨境债权 (续)

6. Cross-border claims (continued)

		银行及 金融机构 Banks and other financial institutions	公共机构 Public sector entities	其他 Others	合计 Total
于二零零一年 十二月三十一日	As at 31 December 2001	港币百万元 HK\$m	港币百万元 HK\$m	港币百万元 HK\$m	港币百万元 HK\$m
亚洲，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
西欧	Western Europe	143,297	3,172	3,934	150,403
加勒比海国家	Caribbean	—	—	3,105	3,105
		<u>311,405</u>	<u>37,469</u>	<u>26,101</u>	<u>374,975</u>

补充财务资料 (续)

Supplementary Financial Information (continued)

7. 逾期及经重组资产

7. Overdue and rescheduled assets

(a) 客户贷款

(a) Advances to customers

(i) 已逾期之总客户
贷款

(i) Gross amount of overdue advances

	二零零二年 六月三十日 As at 30 June 2002 港币百万元 HK\$m	占客户贷款 总额百分比 % of gross advances to customers	二零零一年 十二月三十一日 As at 31 December 2001 港币百万元 HK\$m	占客户贷款 总额百分比 % of gross advances to customers
客户贷款总额				
已逾期：				
— 超过三个月 但不超过 六个月	2,455	0.77%	4,212	1.30%
— 超过六个月 但不超过一年	5,770	1.82%	5,427	1.68%
— 超过一年	13,502	4.25%	15,659	4.85%
	21,727	6.84%	25,298	7.83%

于二零零二年六月三十日及二零零一年十二月三十一日，没有逾期超过三个月之银行及其他金融机构贷款。

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.

补充财务资料 (续)

Supplementary Financial Information (continued)

7. 逾期及经重组资产 (续)

7. Overdue and rescheduled assets (continued)

(a) 客户贷款 (续)

(a) Advances to customers (continued)

(ii) 逾期贷款与不履约贷款：

(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 港币百万元 HK\$m	二零零一年 十二月三十一日 As at 31 December 2001 港币百万元 HK\$m
逾期超过三个月 之贷款	Advances which are overdue for more than three months	21,727	25,298
加：逾期三个月或 以下已停止 累计利息 之贷款	Add: non-accrual advances which are overdue for three months or less		
— 包括在经重 组之贷款内	- included in rescheduled advances	1,480	1,315
— 其他	- others	6,152	10,685
减：逾期超过三个月 并仍累计利息 之贷款	Less: advances which are overdue for more than three months and on which interest is still being accrued	(861)	(1,786)
不履约贷款	Non-performing loans	28,498	35,512

补充财务资料 (续)

Supplementary Financial Information (continued)

7. 逾期及经重组资产 (续)

7. Overdue and rescheduled assets (continued)

(a) 客户贷款 (续)

(a) Advances to customers (continued)

(iii) 经重组贷款 (已扣除上述细项(i)逾期超过三个月之贷款)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 六月三十日 As at 30 June 2002 港币百万元 HK\$m	占客户贷款 总额百分比 % of gross advances to customers	二零零一年 十二月三十一日 As at 31 December 2001 港币百万元 HK\$m	占客户贷款 总额百分比 % of gross advances to customers
经重组贷款				
	Rescheduled advances	1,617 0.51%	1,814 0.56%	

于二零零二年六月三十日及二零零一年十二月三十一日，没有经重组之银行及其他金融机构贷款。

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

(b) 其他逾期资产

(b) Other overdue assets

	二零零二年 六月三十日 As at 30 June 2002 港币百万元 HK\$m	二零零一年 十二月三十一日 As at 31 December 2001 港币百万元 HK\$m
已逾期:		
— 超过三个月 但不超过六个月	- six months or less but over three months	10 9
— 超过六个月 但不超过一年	- one year or less but over six months	21 5
— 超过一年	- over one year	19 4
	50	18

Overdue for:

补充财务资料 (续)**Supplementary Financial Information (continued)****8. 风险管理**

中银香港风险管理的目标是将风险控制可在接受的水平的前提下，获取长期的经风险调节后的资本回报的最大化和股东价值最大化。为保证风险管理目标的实现，我们采取如下措施：

- 建立了更加独立、集中、全面的风险管理体系。该体系注重建立良好公司治理机制，强调股东利益最大化，平衡收益与可接受风险；
- 实行严格的风险管理问责制；
- 采用国际银行风险管理的原则和最佳做法；
- 完善风险管理信息系统、风险衡量技术及风险监控手段；
- 注重改善风险管理文化。

中银香港已制定并实施一套全面的风险管理政策与程序，以识别、衡量、监察及控制全行的信贷风险、市场风险、流动性风险和操作风险。董事会属下的风险管理委员会负责审批风险政策及程序。

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.

补充财务资料 (续)

Supplementary Financial Information (*continued*)

8. 风险管理 (续)

中银香港设立风险管理总监管理风险管理部，直接向董事会风险管理委员会负责，协助总裁组织全行授信风险、市场风险和操作风险的管理工作，并就三类风险的管理状况，每月向董事会风险管理委员会提出独立报告。此外，中银香港设立首席财务官，在司库的协助下监控全行的利率风险和流动性风险，并定期向资产负债管理委员会报告。

中银香港的主要附属银行—南商、集友银行有限公司(「集友」)亦面临同样的业务风险，它们遵循本公司的风险管理策略和政策。此外，南商、集友已实施一套与中银香港风险管理控制及程序一致之风险管理控制及程序。在一般风险管理范畴内，南商和集友可以根据各自的实际情况实施现有的风险管理制度。

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.

补充财务资料 (续)

Supplementary Financial Information (*continued*)

8. 风险管理 (续)

信贷风险管理

信贷风险指客户或交易对手不能或不愿履行其已与中银香港达成的承诺的风险。信贷风险主要来自贷款、贸易融资及财资业务。

中银香港相信，独立、恰当的平衡制约体系是有效风险管理的关键。为此，在中银香港的组织管理架构中，风险管理部和稽核部分别直接向风险管理委员会及稽核委员会报告，形成独立监察机制。

为避免潜在利益冲突，中银香港信贷审核单位独立于业务单位。中银香港的信贷评估强调全面了解贷款目的、贷款结构、借款人的财政状况、现金流量状况、还款能力以及经营管理能力。

中银香港在银行内部采取多层次参与更加谨慎地监察信贷风险，及早发现关注户可能降级的先兆，以采取必要措施。为了提高信贷资产质量，控制并降低不良贷款比率，中银香港制定明确的指标和激励计划，以考核前线业务单位及特殊资产管理部的表现。

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.

补充财务资料 (续)

Supplementary Financial Information (*continued*)

8. 风险管理 (续)

市场风险管理

市场风险是指因为利率或市价波动导致资产负债表以内及以外持仓之亏损的风险。本行的市场风险包括来自客户业务及自营持仓。与市场风险有关的自营持仓每日均会按市值计价基准评估。

市场风险透过由风险管理委员会批核的风险限额进行管理。整体风险限额参照不同的风险因素，例如利率、汇率、商品及股票价格，细分为更具体的限额。在考虑有关产品的不同性质后，采用多种风险计算技术，包括持仓限额及敏感度限额，制定具体限额。

风险管理部设市场风险管理处，负责日常市场风险管理。该处透过每日监察程序，计算实际风险水平与经核准风险限额的差距，并提出具体措施，以确保整体和个别的市场风险均限制在可接受水平之内。

「涉险值」是一种统计学方式，用以在一段特定时间内，按指定的置信度，估计由于汇率、利率、商品及股票价格波动而可能对风险持仓所造成的潜在损失。中银香港以方差／共变方差基准方法，计算投资组合及个别「涉险值」，并采用了市场利率及价格的历史变动、99%置信水平及一天持有期等之基准，并通常考虑不同市场及价格的互相影响关系。

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.

补充财务资料 (续)**Supplementary Financial Information (continued)****8. 风险管理 (续)**

二零零二年六月三十日，中银香港所有自营市场风险持仓的涉险值为6,500,000港元（二零零一年十二月三十一日之数值为1,600,000港元），所有自营利率风险持仓的涉险值为7,800,000港元（二零零一年十二月三十一日为1,500,000港元），而所有自营汇率风险持仓的涉险值为900,000港元（二零零一年十二月三十一日为1,200,000港元）。二零零二年上半年内平均涉险值为2,500,000港元。

中银香港在重组及合并前，中银集团各成员银行各自管理市场风险，故此二零零一年度上半年中银集团的自营市场风险平均涉险值与中银香港二零零二年度同期无可比较性，故未有显示有关数据。

外汇风险管理

中银香港向客户提供外币存款、孖展买卖及远期交易等服务。中银香港在外币市场上的交易活动令其须承担汇率风险。中银香港透过同业市场活动管理汇率风险。其中中银香港透过设定持仓限额及整体外汇交易亏损限额，减低外汇风险。所有限额均经风险管理委员会审批。风险管理部负责每日监察外汇风险及其停止亏损之限额，并控制中银香港在外汇交易产生的信贷风险。

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.

补充财务资料 (续)

Supplementary Financial Information (*continued*)

8. 风险管理 (续)

利率风险管理

中银香港的资产负债表主要包括以港元为单位的利率敏感资产及负债。中银香港的利率风险主要来自此等资产及负债到期日或重订价格期限的错配，以及利率波动风险。此外，不同交易的不同定价基准亦可能令中银香港的资产和负债在同一重订价格期间产生利率风险。

中银香港司库负责制订利率风险管理政策及发展风险管理系统以协助中银香港的资产负债管理委员会确定、量度、监察及控制利率风险。司库利用差距分析量度在每段到期日子或必须重订价格的日子内之计息资产与计息负债差额，以反映在指定的日期之资产负债表所含利率敏感缺口特性。司库以分货币形式将中银香港所有资产、负债及表外项目，根据合约到期日或预计重订价格日期，分别排入对应的时段类别，计算在每个时段内到期或重订价格的资产负债金额之差异，以显示中银香港在新订或重订价格的资产和负债息差方面的潜在变动风险。利率敏感缺口所带来的潜在风险可利用模拟利率的变化以测试缺口对利差的影响幅度是否可以控制，有关的结果均反映在每天的报告内。

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.

补充财务资料 (续)

Supplementary Financial Information (continued)

8. 风险管理 (续)

流动风险管理

流动资金风险来自借贷、自营交易及投资活动，以及管理自营交易持仓时而产生。流动性风险包括在到期日因受不能预计的资金成本上升而令中银香港资产组合出现再融资的风险，和未能及时及／或按合理价格变现某类持仓产生的风险。流动资金管理的目标是令中银香港能够按时应付其所有到期债务(即使在恶劣市况下)和为其投资机会提供资金。

中银香港有多元化的流动资金来源，以灵活地满足其融资需求。中银香港业务的资金主要来自零售及公司客户的存款。虽然中银香港主要为资金贷放者，但中银香港亦会在同业市场上借入短期资金。此外，中银香港亦会不时透过出售投资筹集资金。

中银香港将所得资金大部份用于放贷、投资债券或作同业拆放。一般而言，接受存款的平均到期日较贷款或投资的期限为短，并较同业拆放的平均到期日为长。

中银香港有高度流动及高质素证券缓冲组合，并由中银香港司库管理。这些证券一般可按市场价格随时售出，以配合紧急出现的资金需求。中银香港亦可透过同业市场短期拆借管理其流动资金。同业市场一般可按市况调整的利率提供足够的流动资金。

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.

补充财务资料 (续)

Supplementary Financial Information (*continued*)

8. 风险管理 (续)

中银香港资产负债管理策略的主要目标是要保持足够的流动性和资本金水平，在有效的风险管理机制内及合理的融资成本要求，争取最大回报。中银香港的资产负债管理委员会负责制定政策方针并透过司库的职责确保中银香港有足够的流动资金及能取得最低融资成本，同时紧密策划及监察中银香港的资产负债表内外持仓量所衍生的风险。中银香港司库会按情况调整银行的流动资金及外汇管理盘的持仓水平，以配合资产负债管理委员会政策，并就投资、融资和外汇管理盘的现有水平和预计变化，向资产负债管理委员会汇报和分析。针对流动管理，中银香港已实施各项措施以：

- 改善其管理资讯系统，分别在每日、每周及每月提供有关流动资产变动及客户存款变动的最新资讯；
- 监察流动比率，以符合香港金融管理局的规定；
- 定期编制到期差距分析，协助管理层及时检讨和监察中银香港的流动资金状况；

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;

补充财务资料 (续)

Supplementary Financial Information (*continued*)

8. 风险管理 (续)

- 进行处境分析，以评估不同风险因素对流动资金状况的影响；
- 设定须受监察的一系列流动性风险因素和流动性风险预警系统，为不寻常情况作出预警报告；及
- 设立三级应变机制，更有效处理紧急事件。

资本管理

本集团采用资本充足比率(「CAR」)作为主要量度标准以监控本身资本的充足性，并须符合香港金管局的法定要求。在报表披露的经营期间，集团须维持资本水平以符合各项法定要求。按合并基础计算，未经调整的资本充足比率为14.68%；而经调整了市场风险的资本充足比率为15.02%。两项比率均较法定最低要求为高。与上年底比较，未经调整及经调整后的比率分别有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.

补充财务资料 (续)

Supplementary Financial Information (*continued*)

8. 风险管理 (续)

操作风险管理

操作风险涉及因操作流程不完善、人为过失、电脑系统故障或外部突发事件等因素造成的经济损失。此类风险存在于各项业务及后勤活动中，是中银香港面对的主要风险之一。

中银香港主要透过内部控制制度管理操作风险，以确保所有运作有效执行。同时，中银香港现正完善应变方案，以令一旦出现灾难性事故时，本行的关键业务功能可于短时间内恢复，减低对客户造成之影响。

中银香港将进一步改善识别、衡量、监督及控制操作风险的管理方法，以达至国际水平。

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.