

FINANCIAL PERFORMANCE

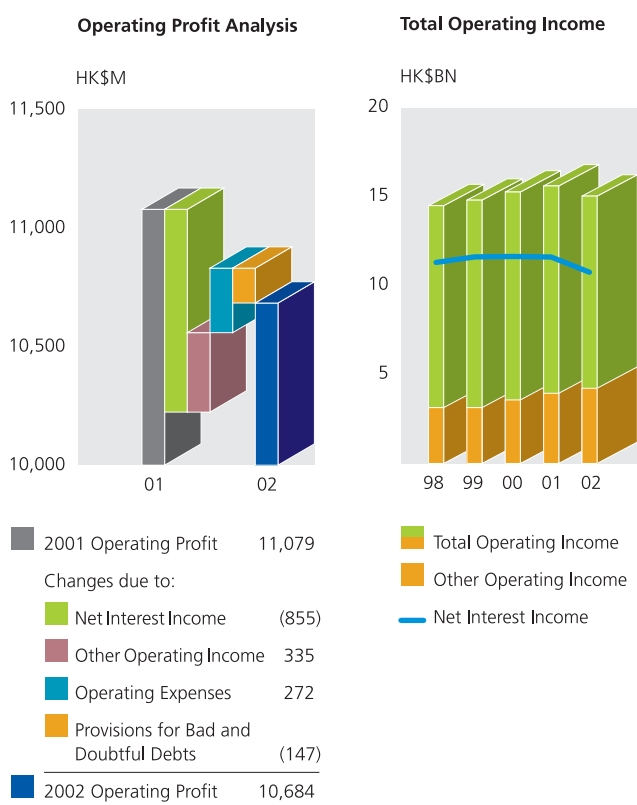
Profit and loss account

Summary of financial performance (HK\$M)	2002	2001
Operating profit before provisions	11,255	11,503
Profit on ordinary activities before tax	11,242	11,514
Profit attributable to shareholders	9,961	10,114
Earnings per share (HK\$)	5.21	5.29

Hang Seng Bank Limited (the Bank) and its subsidiary and associated companies (Hang Seng) reported a profit attributable to shareholders of HK\$9,961 million for 2002, a decrease of 1.5 per cent compared with 2001. Earnings per share of HK\$5.21 were 1.5 per cent lower than in 2001.

Operating profit before provisions fell by HK\$248 million, or 2.2 per cent, to HK\$11,255 million. The positive effects of

an 8.5 per cent increase in other operating income and a 6.6 per cent reduction in operating expenses were outweighed by a 7.3 per cent reduction in net interest income, mainly attributable to the decline in contribution from net free funds. Operating profit decreased by 3.6 per cent to HK\$10,684 million, after accounting for a 34.7 per cent increase in the net charge for bad and doubtful debts. Profit before tax amounted to HK\$11,242 million, which was HK\$272 million, or 2.4 per cent, lower than 2001, despite the increase in profits on disposal of long-term investments and the inclusion of the Bank's share of the value of the long-term assurance business of Hang Seng Life Limited.



Economic profit

In implementing its Managing for Value strategy, Hang Seng has adopted since 1999 economic profit as a value-based performance measurement. This is to align the objectives of Hang Seng's management to that of its shareholders. Management uses economic profit to decide of the allocation of resources among businesses to achieve the best return for shareholders. Economic profit is calculated from profit after tax, adjusted for non-cash items, and takes into account the cost of capital invested by Hang Seng's shareholders.

In 2002, Hang Seng's economic profit decreased by HK\$219 million, or 3.9 per cent, the combined effect of a reduction in the return on invested capital and an increase in average invested capital. For consistency, the benchmark cost of capital of 15.0 per cent was applied. This is, in Hang Seng management's view, above its true

cost of capital taking into account the current interest rate level and Hang Seng's business risk profile. The trend of economic profits in this analysis shows that Hang Seng continues to create value for its shareholders.

Economic profit (HK\$M)	2002	%	2001	%
Average invested capital	31,698		31,061	
Return on invested capital*	10,083	31.8	10,222	32.9
Cost of capital	(4,747)	(15.0)	(4,667)	(15.0)
Economic profit	5,336	16.8	5,555	17.9

* Return on invested capital represents profit after tax adjusted for non-cash items.

Funds under management

Funds under management (HK\$M)	2002	2001
At 1 January	25,366	13,998
Additions	35,590	23,112
Withdrawals	(18,165)	(9,496)
Value change	(2,218)	(2,236)
Exchange and other	35	(12)
At 31 December	40,608	25,366

Funds under management of HK\$40,608 million were HK\$15,242 million, or 60.1 per cent, higher than at 31 December 2001, due to expansion of our asset management and private banking businesses.

Net interest income

Net interest income (HK\$M)	2002	2001
Interest income	14,960	24,509
Interest expense	(4,155)	(12,849)
Net interest income	10,805	11,660
Average interest-earning assets	439,736	454,937
Gross interest yield (% p.a.)	3.40	5.39
Net interest spread (% p.a.)	2.36	2.28
Net interest margin (% p.a.)	2.46	2.56

Net interest income decreased by HK\$855 million, or 7.3 per cent, mainly attributable to the fall in contribution from net free funds due to lower market interest rates. There was a reduction in average interest-earning assets of HK\$15.2 billion, or 3.3 per cent, plus a compression in net interest margin of 10 basis points to 2.46 per cent, the net effect of a rise of 8 basis points in net interest spread and a reduction of 18 basis points in the contribution from net free funds.

Net interest spread improved by 8 basis points to 2.36 per cent, which benefited by 11 basis points from improved spreads on the holding of investment securities and gained 5 and 4 basis points respectively from the growth in lower cost savings deposits and a wider spread earned on time deposits. These were partly offset by a further decline in the average yield on the mortgage portfolio (including those under the Government Home Ownership Scheme), which reduced net interest spread by 12 basis points. The contribution from net free funds fell by 18 basis points to 0.10 per cent, which accounted for a reduction of about HK\$850 million in net interest income.

As a result of the continued reduction in the pricing of new mortgages and the re-pricing of existing loans, the average yield on the residential mortgage portfolio, excluding Government Home Ownership Scheme mortgages and staff loans, fell from 84 basis points below the best lending rate (BLR) in 2001 to 149 basis points below BLR in 2002. This was before accounting for the effect of cash incentive payments.

Compared with the first half of 2002, net interest income in the second half of 2002 fell by HK\$101 million, or 1.9 per cent, with a 6 basis point fall in net interest margin to 2.43 per cent. Net interest spread decreased by 5 basis points to 2.33 per cent, mainly due to the further decline in the average yield on the mortgage portfolio. The contribution from net free funds was 1 basis point lower at 0.10 per cent.

Other operating income

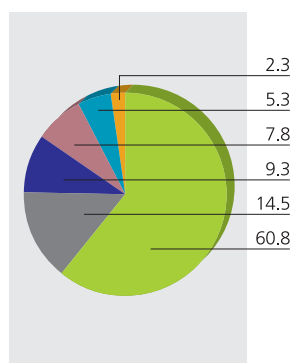
Other operating income rose by HK\$335 million, or 8.5 per cent, and contributed 28.4 per cent of total operating income, compared with 25.3 per cent in 2001. Net fees and commissions increased by HK\$197 million, or 8.2 per cent, mainly attributable to the increase of HK\$330 million, or

89.2 per cent, in fees from the distribution and management of retail investment funds. Insurance fees and commissions fell by HK\$81 million, or 19.1 per cent, mainly affected by a reduction in commissions from Mandatory Provident Fund (MPF) services due to higher commissions received from new customers in the previous year. Commissions from credit facilities and card services also decreased by 11.5 per cent and 5.5 per cent respectively.

Dealing profits grew by HK\$90 million, or 17.0 per cent, with improvements in foreign exchange income and securities and other trading results. Insurance underwriting profit increased by HK\$107 million, or 47.3 per cent, mainly due to consolidation of the underwriting profit of Hang Seng Life Limited which became a subsidiary of the Bank in

Other Operating Income for 2002

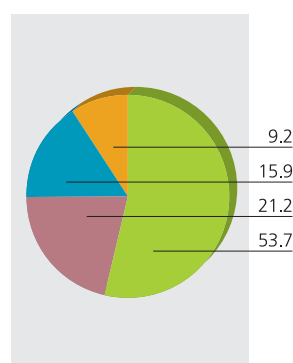
In Percentage



- Net Fees and Commissions Receivable
- Net Dealing Profits
- Other
- Insurance Underwriting
- Rental Income from Investment Properties
- Dividend Income

Operating Expenses for 2002

In Percentage



- Staff Costs
- Premises and Equipment
- Other Operating Expenses
- Depreciation

November 2002. Other income fell by HK\$45 million, or 10.1 per cent, mainly due to lower loan redemption fees.

Income from wealth management services, comprising income from investment (securities broking and related services, investment funds distribution and management, margin trading and private banking) and insurance (underwriting and distribution of life and non-life insurance products and MPF services), grew strongly by 32.6 per cent to HK\$1,608 million, indicating increased product cross-selling to customers. It represented 37.6 per cent of total other operating income.

Operating expenses

Operating expenses fell by HK\$272 million, or 6.6 per cent, to HK\$3,832 million. Staff costs decreased by HK\$209 million, or 9.2 per cent, mainly due to the non-recurrence of a special top-up contribution for the staff retirement benefit scheme made in 2001. Depreciation charges dropped by HK\$34 million, or 8.8 per cent, reflecting a lower level of capital expenditure. Premises and equipment expenses decreased by HK\$55 million, or 6.3 per cent, attributable to a reduction in IT expenditure after the spending in previous years on the development of e-banking initiatives. Other operating expenses increased by HK\$26 million, or 4.5 per cent, mainly in marketing expenditure for the promotion of personal financial services products.

The cost:income ratio fell by 0.9 percentage point to 25.4 per cent, compared with 26.3 per cent for 2001.

Headcount measured in full time equivalents was 7,279 at 31 December 2002 (7,488 at 31 December 2001).

Provisions for bad and doubtful debts

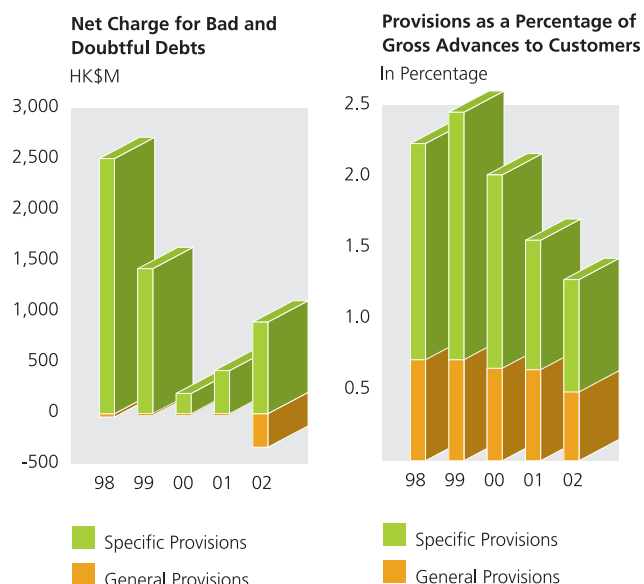
Net charge to profit and loss account (HK\$M)	2002	2001
Net charge/(release) for bad and doubtful debts		
Specific	901	424
General	(330)	–
Total	571	424
Average gross advances to customers	225,725	224,088
Net charge/(release) for bad and doubtful debts as a percentage of average gross advances to customers		
Specific	0.4%	0.2%
General	(0.1%)	–
Total	0.3%	0.2%

The net charge for bad and doubtful debts amounted to HK\$571 million, an increase of HK\$147 million, or 34.7 per cent, compared with the previous year. New and additional specific provisions rose by HK\$96 million, or 8.5 per cent, to HK\$1,231 million, with a reduction in specific charges for corporate accounts and residential mortgages more than offset by a rise in specific charges for card advances and personal loans due to the rise in personal bankruptcies. Releases and recoveries reduced by HK\$381 million, or 53.6 per cent, to HK\$330 million, mainly in taxi loans and corporate accounts. There was a release of general provisions of HK\$330 million, reflecting a reduction in Hang Seng's estimate of the latent loan losses, which had occurred at the balance sheet date but which had not yet been reflected through the establishment of specific provisions. The estimate of these latent losses reflects Hang Seng's historical experience of the rate at which such losses occur and are identified, the structure of Hang Seng's loan portfolio and the economic and credit conditions prevailing at the balance sheet date.

Advances to customers and provisions (HK\$M)	2002	2001
Gross advances to customers*	227,475	225,926
Specific provisions	(1,805)	(2,052)
General provisions	(1,108)	(1,438)
Advances to customers**	224,562	222,436
Gross non-performing advances*	6,081	6,174
Non-performing advance* as a percentage of gross advances to customers*	2.7%	2.7%
Provisions as a percentage of gross advances to customers*		
Specific provisions	0.79%	0.91%
General provisions	0.49%	0.64%
Total provisions	1.28%	1.55%
Specific provisions as a percentage of gross non-performing advances*	29.7%	33.2%

* After deduction of interest in suspense.

** After deduction of interest in suspense and provisions.



Gross non-performing advances (after deduction of interest in suspense) fell by HK\$93 million, or 1.5 per cent, to HK\$6,081 million, compared with the end of 2001. The ratio of gross non-performing advances to gross advances to customers was maintained at 2.7 per cent, the same level as at the end of 2001.

Profit on tangible fixed assets and long-term investments

Profit on disposal of tangible fixed assets and long-term investments rose by HK\$68 million, or 17.3 per cent, to HK\$461 million, reflecting increased profits on the disposal of locally-listed equities partly offset by lower profits on the disposal of debt securities.

Property revaluation

Hang Seng's premises and investment properties were revalued by Chesterton Petty Limited, an independent professional valuer, at 30 September 2002 who confirmed that there had been no material change in valuations at 31 December 2002. The valuations were carried out by qualified valuers who are members of the Hong Kong Institute of Surveyors. The basis of the valuation of premises was open market value for existing use. The basis of the valuation for investment properties was open market value. The property revaluation has resulted in a fall in Hang Seng's revaluation reserves of HK\$692 million as at 31 December 2002 and a charge to the profit and loss account of HK\$36 million in respect of properties where the valuation has fallen below the depreciated historical cost.

Balance sheet

Total assets

Total assets of HK\$474.6 billion were in line with 31 December 2001. Customer deposits were almost flat with a continued shift of time deposits to savings under the persistently low interest rate environment. Advances to customers grew by 1.0 per cent during 2002, mainly in residential mortgages, corporate lending and trade advances while mortgages under the Government Home Ownership Scheme fell. Investment in debt securities also rose, with funds re-deployed from lower yielding interbank placements. The advances to deposits ratio rose to 54.3 per cent at 31 December 2002 from 53.7 per cent at 31 December 2001, the effect of a modest growth in customer advances against stable customer deposits.

Assets deployment

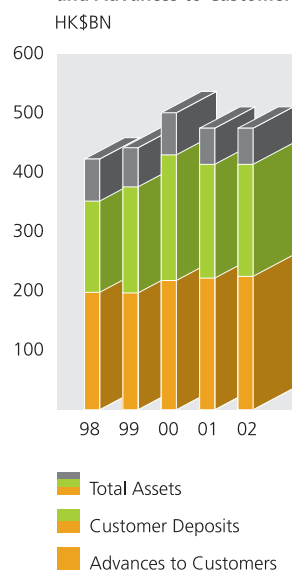
At 31 December (HK\$M)	2002	%	2001	%
Cash and short-term funds	77,784	16.4	111,099	23.4
Placings with banks maturing after one month	30,919	6.5	43,666	9.2
Certificates of deposit	30,120	6.4	23,203	4.9
Investment securities	80,367	16.9	45,429	9.6
Advances to customers	224,562	47.3	222,436	46.8
Other assets*	30,850	6.5	28,954	6.1
Total assets	474,602	100.0	474,787	100.0

* Amounts due from immediate holding company and fellow subsidiary companies are included under other assets.

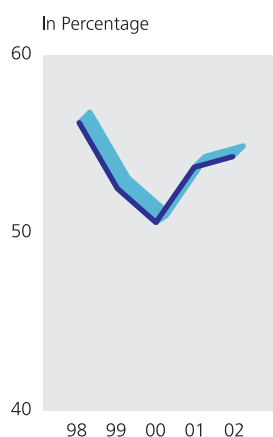
Investment securities

Securities held for dealing purposes decreased by HK\$1.0 billion, or 44.7 per cent, to HK\$1.2 billion, while investment in held-to-maturity debt securities increased by HK\$37.2 billion, or 94.1 per cent, to HK\$76.9 billion with funds

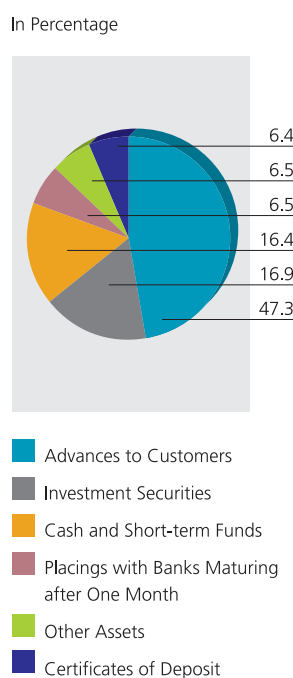
Total Assets, Customer Deposits and Advances to Customers



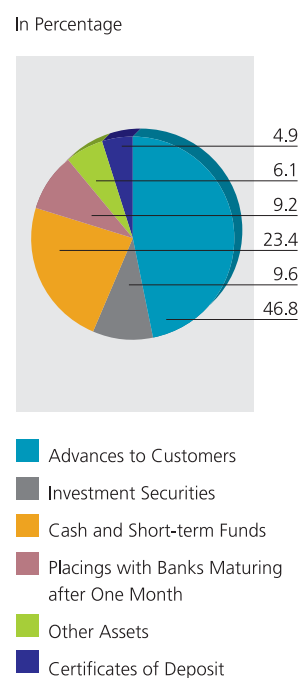
Advances to Deposits Ratio



Assets Deployment for 2002



Assets Deployment for 2001



re-deployed from interbank placings to enhance net interest yield. Over 95 per cent of the held-to-maturity debt securities will mature within five years. The fair value of the held-to-maturity debt securities at 31 December 2002 amounted to HK\$78.0 billion, with an unrealised gain of HK\$1.2 billion compared with an unrealised gain of HK\$0.5 billion at 31 December 2001.

Equity investments decreased by HK\$1.3 billion, or 36.7 per cent, to HK\$2.3 billion.

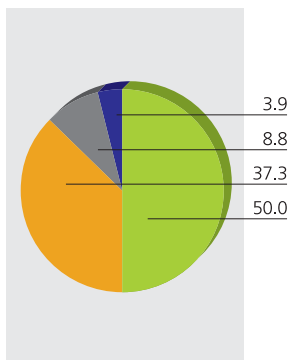
Advances to customers

Advances to customers (after deduction of interest in suspense and provisions) recorded a modest growth of HK\$2,126 million, or 1.0 per cent, to HK\$224.6 billion at 31 December 2002, as loan demand remained subdued under the uncertain economic environment.

Hang Seng gained market share of total loans and loans for use in Hong Kong in 2002.

Customer Deposits for 2002

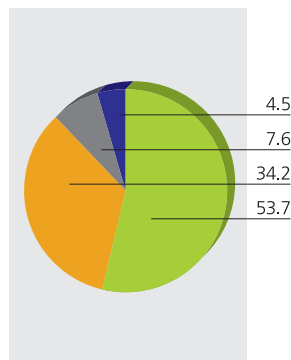
In Percentage



- Time and Other Deposits
- Savings Accounts
- Current Accounts
- Certificates of Deposit and Other Debt Securities in Issue

Customer Deposits for 2001

In Percentage



- Time and Other Deposits
- Savings Accounts
- Current Accounts
- Certificates of Deposit and Other Debt Securities in Issue

Customer deposits

Customer deposits accounts were maintained at HK\$397.7 billion at 31 December 2002, with a marginal growth of HK\$1.9 billion, or 0.5 per cent, over the previous year-end and no material change in currency mix. Funds continued to shift from time deposits to savings accounts under the persistently low interest rate environment. In 2002, Hang Seng gained market share of total deposits in Hong Kong.

Certificates of deposit and other debt securities in issue fell by HK\$2.6 billion to HK\$16.0 billion with a lower level of new issues made during the year.

Shareholders' funds

At 31 December (HK\$M)	2002	2001
Share capital	9,559	9,559
Retained profits	19,242	19,618
Premises and investment properties revaluation reserves	7,324	8,119
Long-term equity investment revaluation reserve	1,031	2,323
Capital redemption reserve	99	99
	37,255	39,718
Proposed dividends	6,309	5,353
Shareholders' funds	43,564	45,071
Return on average shareholders' funds (% p.a.)	22.9	23.0

Shareholders' funds (excluding proposed dividends) fell by HK\$2,463 million, or 6.2 per cent, to HK\$37,255 million at 31 December 2002. Retained profits were reduced by HK\$376 million, the net effect of the proposed special interim dividend of HK\$956 million and the current year profit after appropriation of HK\$593 million. Premises and investment properties revaluation reserves fell by HK\$795 million as a result of the further decline in the property market. The disposal and decrease in the fair value of long-term equities led to a reduction of HK\$1,292 million in the long-term equity investment revaluation reserve.

The return on average shareholders' funds was 22.9 per cent, in line with the 23.0 per cent return in 2001.

There was no purchase, sale or redemption of the Bank's listed securities by the Bank or any of its subsidiaries during the year.

CAPITAL MANAGEMENT

Capital resources management

Analysis of capital base and risk-weighted assets (HK\$M)	2002	2001
<i>Capital base</i>		
Tier 1 capital		
Share capital	9,559	9,559
Retained profits	18,795	19,342
Capital redemption reserve	99	99
Total	28,453	29,000
Tier 2 capital		
Premises and investment properties revaluation reserves	5,153	5,708
Long-term equity investment revaluation reserve	705	1,418
General loan provisions	1,108	1,437
Total	6,966	8,563
Unconsolidated investments and other deductions	(1,376)	(1,331)
Total capital base after deductions	34,043	36,232
<i>Risk-weighted assets</i>		
On-balance sheet	222,758	221,565
Off-balance sheet	16,262	14,726
Total risk-weighted assets	239,020	236,291
Total risk-weighted assets adjusted for market risk	239,426	236,588
<i>Capital adequacy ratios</i>		
After adjusting for market risk		
Tier 1*	11.9%	12.3%
Total*	14.2%	15.3%
Before adjusting for market risk		
Tier 1	11.9%	12.3%
Total	14.2%	15.3%

* The capital ratios take into account market risks in accordance with the relevant Hong Kong Monetary Authority guideline under the Supervisory Policy Manual.

The capital base fell by HK\$2,189 million, or 6.0 per cent, due to the proposed special interim dividend to be paid out of retained profit and the fall in premises and investment properties revaluation reserves and long-term equity investment revaluation reserve. Total risk-weighted assets adjusted for market risk rose by HK\$2,838 million, or 1.2 per cent, to HK\$239.4 billion. The total capital ratio and tier 1 ratio reduced by 1.1 percentage points and 0.4 percentage point respectively.

RISK MANAGEMENT

Risk management is an integral part of Hang Seng's business management. The most important types of risks to which Hang Seng is exposed to are credit risk, liquidity risk, market risk and operational risk. Market risk includes foreign exchange, interest rate and equity price risks. Hang Seng's risk management policy is designed to identify and analyse risks, to set appropriate risk limits and to monitor these risks and limits continually by means of reliable and up-to-date management information systems. Hang Seng's risk management policies and major control limits are approved by the Board of Directors and they are monitored and reviewed regularly by the Executive Committee and Audit Committee.

Credit risk

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 Hang Seng. It arises principally from lending, trade finance, treasury and leasing activities. Hang Seng has standards, policies and procedures in place to control and monitor all such risks.

Credit Risk Management (CRM) is mandated to provide centralised management of credit risk. CRM is headed by the Chief Credit Officer who reports to the Chief Executive and functionally reports to the HSBC Group Credit and Risk. Hang Seng conforms with the HSBC Group standards in establishing its credit policies. The responsibilities of CRM are as follows:

- formulation of credit policies which are embodied in the Credit Risk Manual as approved by the Board of Directors;
- establishment and maintenance of the Large Credit Exposure Policy setting controls on exposures to customers and customer groups and on other risk concentrations;
- issue of Lending Guidelines to provide business units with clear guidance on Hang Seng's attitude towards and appetite for lending to different market sectors, industries, and products etc. They are regularly updated and provided to all credit and marketing executives;
- independent review and objective assessment of risk. CRM undertakes an independent assessment of all commercial non-bank credit facilities over designated limits originated by business units, prior to the facilities being offered to the customer. Renewals and reviews of commercial non-bank facilities over designated levels are also subject to such independent review and assessment;
- control of exposures to banks and financial institutions. As full authority has been devolved to HSBC Group Credit and Risk to approve Hang Seng's credit and settlement risk limits to counterparties in the financial and government sectors, Hang Seng CRM co-ordinates with the dedicated unit within

Group Credit and Risk which controls and manages these exposures on a global basis using centralised systems and automated processes;

- control of cross-border exposures. Similar to the control of exposures to banks and financial institutions, CRM co-ordinates with the dedicated unit within Group Credit and Risk to control country and cross-border risk using centralized systems, through the imposition of country limits with sub-limits by maturity and type of business. Country limits are determined taking into account economic and political factors together with local business knowledge. Transactions with countries deemed to be higher risk are considered on a case-by-case basis;
- control of exposure to certain industries including shipping and aviation industries, and close monitoring of exposures to other industries or products such as telecoms, commercial and residential real estate. Controls and restrictions on new business or the capping of exposure may be introduced where necessary;
- maintenance of facility grading process. Hang Seng adopts HSBC's grading structure which contains seven grades, the first three of which are applied to differing levels of satisfactory risk. Of the four unsatisfactory grades, grades 6 and 7 are non-performing loans. In the case of banks, the grading structure involves 10 tiers, six of which cover satisfactory risk. It is the responsibility of the final approver to approve the facility grade. Facility grades are subject to frequent review and amendments, where necessary, are required to be undertaken promptly;
- reporting to management on aspects of the loan portfolio. Reports are submitted to the Credit Committee, Executive Committee, Audit Committee, the Board of Directors and Group Credit and Risk covering:
 - risk concentrations and exposures to industry sectors
 - large customer group exposure
 - large non-performing accounts and provisions
 - specific segments of the portfolio such as residential mortgages, commercial real estate, telecoms, credit cards, as well as ad hoc reviews as necessary
 - country limits and cross-border exposures;
- management and direction of credit-related systems initiatives in the development of standard credit-related systems to ensure cost efficiency;
- provision of advice and guidance to business units on various credit-related issues.

Liquidity risk

Liquidity management is essential to ensure the Bank has the ability to meet its obligations as they fall due. It is Hang Seng's policy to maintain a strong liquidity position by properly managing the liquidity structure of its assets, liabilities and commitments so that cash flows are appropriately balanced and all funding obligations are comfortably met.

Hang Seng is required to comply with the regulatory liquidity requirement, mainly to maintain the liquidity ratio in accordance with the Fourth Schedule of the Hong Kong Banking Ordinance. Hang Seng's average liquidity ratio in

2002 stood at 44.4 per cent (45.6 per cent in 2001) which well exceeded the minimum requirement of 25%.

In addition, Hang Seng also comply with the HSBC Group's liquidity requirements, which impose stricter criteria for the holding of liquid assets, as prescribed by the HSBC Group Executive Committee.

Hang Seng has established policies and procedures to monitor and control its liquidity position on a daily basis by adopting a cash flow management approach. Hang Seng always maintains a stock of high quality liquid assets to ensure the availability of sufficient cash flow to meet its financial commitments, including customer deposits on maturity and undrawn facilities, over a specified future period. The liquidity management process is monitored by the Asset and Liability Management Committee and is reported to the Executive Committee and the Board of Directors.

As a major source of funding, Hang Seng maintains a diversified and stable customer deposit base, both by maturity and market segment. Hang Seng is active in the local money and capital markets to manage the maturity profile of assets and liabilities and to secure the availability of interbank and wholesale deposits at market rates.

Market risk

Market risk is the risk that movements in interest rates, foreign exchange rates or equity and commodity prices will result in profits or losses to Hang Seng. Market risk arises on financial instruments which are valued at current market prices (mark-to-market basis) and those valued at cost plus any

accrued interest (accrual basis). Hang Seng's market risk arises from customer-related business and from position taking.

Market risk is managed within risk limits approved by the Board of Directors. Risk limits are set by product and risk type with market liquidity being a principal factor in determining the level of limits set. Limits are set using a combination of risk measurement techniques, including position limits, sensitivity limits, as well as value at risk (VAR) limits at a portfolio level.

Hang Seng adopts the risk management policies and risk measurement techniques developed by the HSBC Group. The daily risk monitoring process measures actual risk exposures against approved limits and triggers specific action to ensure the overall market risk is managed within an acceptable level.

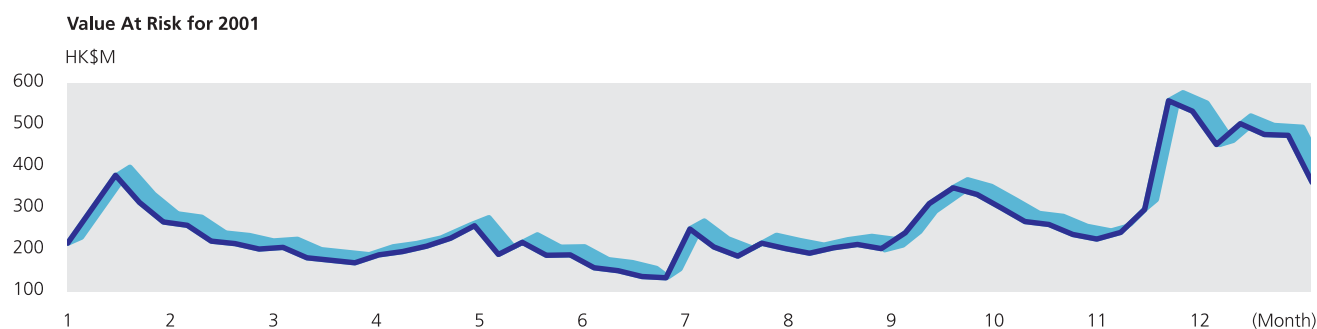
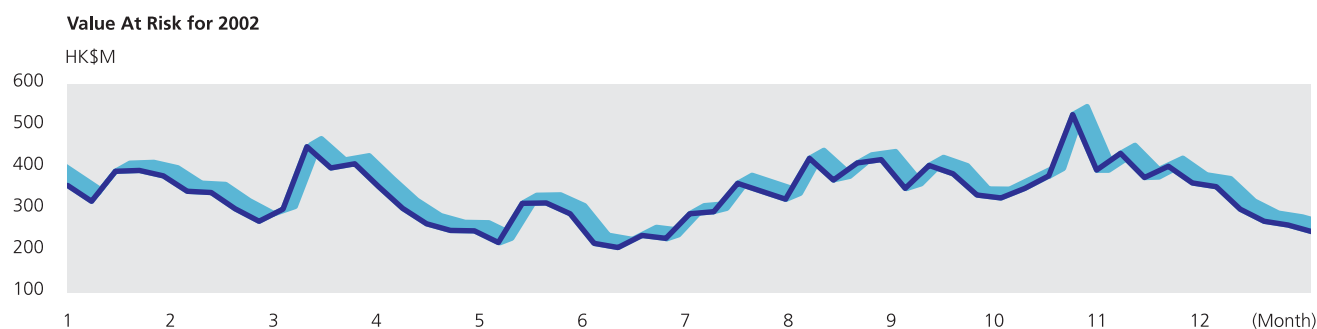
VAR is a technique which estimates the potential losses that could occur on risk positions taken due to movements in market rates and prices over a specified time horizon and to a given level of confidence. The model used by Hang Seng calculates VAR on a variance/covariance basis, using historical movements in market rates and prices, a 99 per cent confidence level and a 10-day holding period, and generally takes account of correlations between different markets and rates. The movement in market prices is calculated by reference to market data for the last two years. Aggregation of VAR from different risk types is based upon the assumption of independence between risk types.

Hang Seng has obtained approval from the Hong Kong Monetary Authority (HKMA) for the use of its VAR model to calculate market risk for capital adequacy reporting. The HKMA is also satisfied with Hang Seng's market risk management process.

Hang Seng's VAR for all interest rate risk and foreign exchange risk positions and on individual risk portfolios during the years 2002 and 2001 are shown in the table.

VAR (HK\$M)	At 31 December 2002	Minimum during the year	Maximum during the year	Average for the year
VAR for all interest rate risk and foreign exchange risk	234	194	520	326
VAR for foreign exchange risk (trading)	3	3	5	4
VAR for interest rate risk				
- trading	1	-	9	2
- accrual	233	192	515	325

VAR (HK\$M)	At 31 December 2001	Minimum during the year	Maximum during the year	Average for the year
VAR for all interest rate risk and foreign exchange risk	352	119	562	248
VAR for foreign exchange risk (trading)	4	3	8	5
VAR for interest rate risk				
- trading	3	1	18	4
- accrual	353	117	565	247



The average daily revenue earned from market risk-related treasury activities in 2002, including accrual book net interest income and funding related to dealing positions, was HK\$7 million (HK\$7 million for 2001). The standard deviation of these daily revenues was HK\$3 million (HK\$3 million for 2001). An analysis of the frequency distribution of daily revenues shows that out of 247 trading days in 2002, losses were recorded on only one day, with a loss of HK\$19 million. The most frequent result was a daily revenue of between HK\$4 million and HK\$8 million, with 212 occurrences. The highest daily revenue was HK\$33 million.

Foreign exchange exposure

Hang Seng's foreign exchange exposures mainly arise from foreign exchange dealing by Treasury and currency exposures originated by its banking business. The latter are transferred to Treasury where they are centrally managed within the foreign exchange position limits approved by the

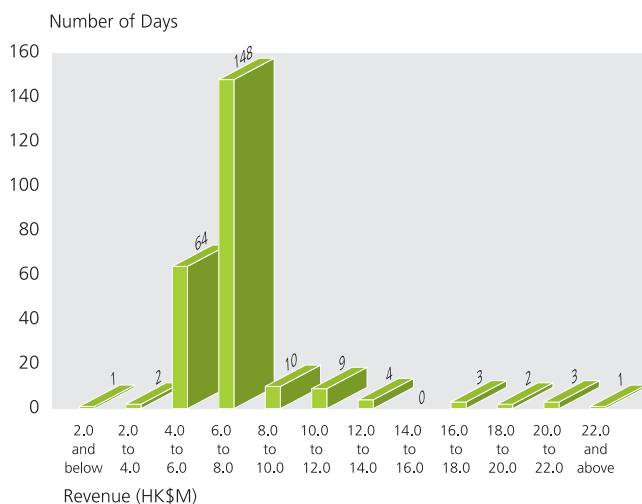
Board of Directors. The average one-day foreign exchange profit for 2002 was HK\$2 million (HK\$1 million for 2001). Structural positions include or comprise investments in fixed assets and premises, capital and statutory reserves of overseas branches and investments in overseas subsidiaries.

At 31 December 2002, the US dollar was the only currency in which Hang Seng had a non-structural foreign currency position which exceeded 10 per cent of the total net position in all foreign currencies.

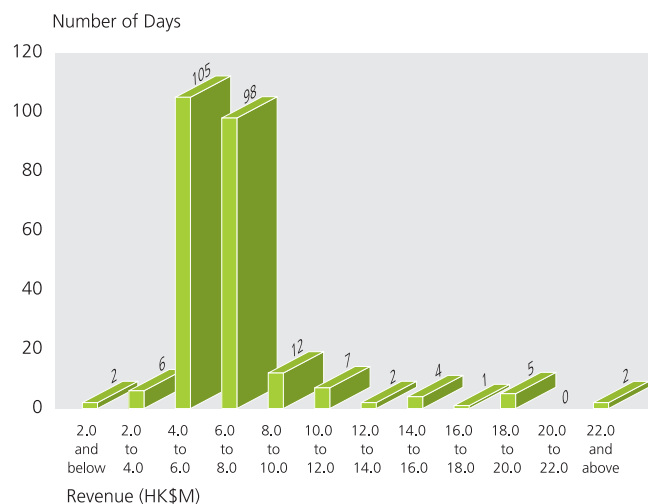
Total foreign currency positions (HK\$M)

	2002		
	USD	Other foreign currencies	Total foreign currencies
Spot assets	173,129	93,023	266,152
Spot liabilities	(156,175)	(92,093)	(248,268)
Forward purchases	35,222	11,284	46,506
Forward sales	(39,974)	(12,101)	(52,075)
Net options positions	–	–	–
Net long non-structural position	12,202	113	12,315
Net structural position	792	149	941

Daily Distribution of Market Risk Revenues for 2002



Daily Distribution of Market Risk Revenues for 2001



Interest rate exposure

Interest rate risk arises in both the treasury dealing portfolio and accruals books, which are managed by Treasury under limits approved by the Board of Directors. The average daily revenue earned from treasury-related interest rate activities for 2002 was HK\$5 million (HK\$5 million for 2001).

Structural interest rate risk arises primarily from the deployment of non-interest bearing liabilities, such as shareholders' funds and some current accounts, as well as fixed rate loans and liabilities other than those generated by the treasury business. Structural interest rate risk is monitored by Hang Seng's Asset and Liability Management Committee.

Interest rate sensitivity analysis (HK\$M)

	2002					Total
	Up to 3 months	More than 3 months and up to 6 months	More than 6 months and up to 12 months	More than 12 months	Non-interest earning/bearing	
Assets						
Cash and short-term funds	73,149	461	858	–	3,316	77,784
Placings with banks maturing after one month	27,996	969	1,954	–	–	30,919
Certificates of deposit	19,315	660	1,058	9,087	–	30,120
Investment securities	39,182	1,799	4,018	33,053	2,315	80,367
Advances to customers	197,350	9,934	8,012	5,098	4,168	224,562
Other assets*	5,206	38	835	992	23,779	30,850
Total assets	362,198	13,861	16,735	48,230	33,578	474,602
Liabilities						
Current, savings and other deposit accounts	383,063	4,729	6,628	3,653	15,620	413,693
Deposits from banks	514	2	–	–	556	1,072
Other liabilities*	1,898	808	685	875	11,563	15,829
Minority interests	–	–	–	–	444	444
Shareholders' funds	–	–	–	–	43,564	43,564
Total liabilities	385,475	5,539	7,313	4,528	71,747	474,602
Off-balance sheet items						
	3,970	4,936	61	(8,967)	–	–
Net gap position	(19,307)	13,258	9,483	34,735	(38,169)	–
Cumulative gap position	(19,307)	(6,049)	3,434	38,169	–	–

* Amounts due from / to immediate holding company and fellow subsidiary companies are included under other assets and other liabilities.

Interest rate sensitivity analysis is useful in managing the interest rate risk of the accrual portfolio. The table on page 73 discloses the mismatching of the dates on which interest receivable on assets and payable on liabilities are next reset to market rates on a contractual basis, or, if earlier, the dates on which the instruments mature. Actual reset dates may differ from contractual dates owing to prepayments and the exercise of options. In addition, contractual terms may not be representative of the behaviour of assets and liabilities. For these reasons, Hang Seng takes into account behavioural characteristics in the management of its interest rate risk, rather than on the contractual basis set out in the table on page 73.

A positive interest rate sensitivity gap exists where more assets than liabilities re-price in a given period. Although a positive gap position tends to benefit net interest income in a rising interest rate environment, the actual effect will depend on a number of factors, including the extent to which repayments are made earlier or later than the contracted date and variations in interest rates within re-pricing periods and among currencies. Similarly, a negative interest rate sensitivity gap exists where more liabilities than assets re-price during a given period. In this case, a negative gap position tends to benefit net interest income in a declining interest rate environment, but again the actual effect will depend on the same factors as for positive interest rate gaps.

Equities exposure

Hang Seng's equities exposure in 2002 is mainly in long-term equity investments which are set out in note 19 of the financial statements.

Derivatives

Positions of derivative contracts outstanding (HK\$M)

	2002			
	Contract amount		Mark-to-market values	
	Dealing	Non-dealing	Positive	Negative
Foreign exchange contracts				
Spot and forward	73,607	–	418	263
Currency swaps	1,380	517	31	31
Currency options	22,207	–	36	35
Interest rate contracts				
Interest rate swaps	31,685	32,758	1,222	1,416
Futures and forward rate agreements	57	–	–	1
Interest rate options	1,000	6,912	8	11
Equity contracts				
Equity futures	3	–	–	–
Equity options	174	–	1	1
Analysis of mark-to-market values				
Trading contracts			1,164	946
Non-trading contracts			552	812

Derivatives are financial contracts whose value and characteristics are derived from underlying assets, exchange and interest rates, and indices. They mainly include futures, forwards, swaps and options in foreign exchange, interest rate, equity and equity indices and commodities. Derivative positions arise from transactions with customers as well as Hang Seng's own dealing and asset and liability management activities. These positions are managed carefully to ensure that they are within acceptable risk levels.

Derivative instruments are subject to both market risk and credit risk. Market risk from derivative positions is controlled individually and in combination with on-balance sheet market risk positions within Hang Seng's market risk limits regime as described on page 70. The credit risk relating to a derivative contract is principally the replacement cost of the contract when it has a positive mark-to-market value and the estimated potential future change in value over the residual maturity of the contract. The nominal value of the contracts does not represent the amount of Hang Seng's exposure to credit risk. All activities relating to derivatives are subject to the same credit approval and monitoring procedures used for other credit transactions.

The table on page 74 provides an analysis of derivatives by product at 31 December 2002, showing those contracts undertaken for dealing and non-dealing purposes. Hang Seng's derivative positions are mainly in foreign exchange and interest rate contracts. Option contracts are mainly undertaken for option-linked investment/deposit products provided to customers and the related hedges. Mark-to-market values of derivatives designated for dealing purpose are included in "Other assets" for positive amounts and "Other liabilities" for negative amounts.

Operational risk

Operational risk is the risk of economic loss arising through fraud, unauthorised activities, error, omission, inefficiency, systems failure or from external events. The risk of losses

caused by human error and fraud is mitigated under a well-established internal control environment in which processes are documented, authorisation is independent and where transactions are reconciled and monitored. Details are described in the "Corporate Governance and Other Information" on pages 86 and 87. Adequate insurance cover is taken to minimise losses in business operation and on the holding of fixed assets. To reduce the impact of and interruptions to business activities caused by system failure or natural disaster, back-up systems and contingency business resumption plans are in place for all business and critical back-office functions. Back-up computer systems and business resumption back-up sites are maintained. Detailed contingency recovery procedures are clearly documented, with periodic drills conducted to ensure the procedures are current and correct.