Credit and Country Risk Management

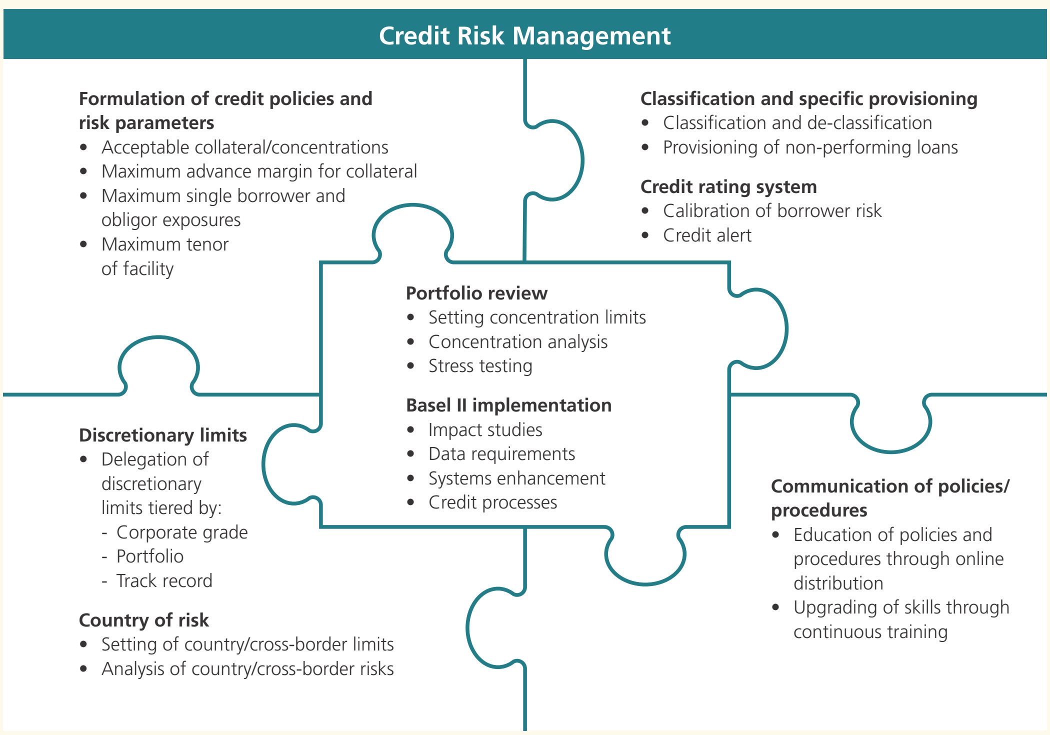
Credit risk

Counter-party and credit risk is defined as the potential loss arising from any failure by customers to fulfill their obligations, as and when they fall due. All credit exposures, whether on-balance sheet or off-balance sheet, are assessed. These obligations may arise from lending, trade finance, investment, receivables under derivative and foreign exchange contracts and other credit-related activities undertaken by the Group.

The Credit Committee, under delegated authority from the Board of Directors, approves credit policies, guidelines and procedures to control and monitor such risks. It has day-to-day responsibility for identifying and managing portfolio and risk concentration issues, including country exposure and industry sector exposure. The risk parameters for accepting credit risk are clearly defined and complemented by policies and processes to ensure that the Group maintains a well-diversified and high-quality credit portfolio. The decisions of the Credit Committee and its monthly risk management reports are reviewed by the Executive Committee of the Board.

Credit discretionary limits are delegated to officers of individual business units, depending on their levels of experience. Approval of all credits is granted in accordance with credit policies and guidelines. Defined credit risk parameters include single borrower, obligor, security concentrations, identified high-risk areas, maximum tenor, acceptable structures and collateral types.

Policies are also in place to govern the approval of 'Related Parties' credit facilities. 'Related Parties' refer to individuals or companies with whom the authorised credit approving authority and/or his/her immediate family members have a relationship, whether as director, partner, shareholder or any other relationship which would give rise to a potential conflict of interest.



Credit relationships with 'Related Parties' must be established on a strictly arm's length commercial basis. An approving authority shall abstain and absent himself/herself from the deliberation and approval of credit cases where the borrower is a 'Related Party' except when the 'Related Party' is a:

- company within the UOB Group;
- publicly listed company or company related to a publicly listed company;
- company formed by professional bodies, trade or clan associations, or societies.

The Board of Directors must be informed immediately in the event that any 'Related Party' borrower is in default of payment and/or in breach of any material term of the credit facility and such default or breach is not rectified within seven days of notice from the Group.

A comprehensive set of limits (country, regional, industry and counter-party) is in place to address concentration issues in the Group's portfolio. A rigorous process is established to regularly review and report asset concentrations and portfolio quality so that risks are accurately assessed, properly approved and monitored. These cover large credit exposures by obligor group, collateral type, industry, product, country, level of non-performing loans and adequacy of provisioning requirements.

In particular, the trends and composition of exposures to property-related loans are closely monitored, analysed and reported on an on-going basis to ensure that exposures are kept within regulatory limits and internal guidelines. The exposure concentrations and non-performing loans by industry type are reported to the Credit Committee and the Executive Committee of the Board on a monthly basis and to the Board of Directors on a quarterly basis.

Credit audits and reviews are regularly carried out to proactively identify and address potential weakness in the credit process and to pre-empt any unexpected deterioration in the credit quality.

UOB became a Settlement Member of the global Continuous Linked Settlement (CLS) system in December 2002. CLS was set up to manage the risks in cross-border transactions where huge payments are made before the currency due is received. Settling foreign exchange transactions under CLS eliminates the risk of losing principal amounts paid to counter-parties in foreign exchange transactions as the exchange of currencies between counter-parties are settled on a payment-versus-payment basis. Eleven currencies are currently eligible for settlement through CLS, namely, Australian dollar, British pound, Canadian dollar, Danish krone, Euro, Japanese yen, Norwegian krone, Singapore dollar, Swedish krona, Swiss franc and US dollar. Currently, about 50% of the Bank's foreign exchange transactions are settled through CLS, effectively reducing the Bank's foreign exchange settlement risk.

The Group has intensified its preparations for the New Basel Capital Accord (Basel II) that is scheduled for implementation in 2007. It has strengthened its resources and infrastructure to put in place the changes that will be brought about by the new credit risk requirements. The Group intends to adopt the Standardised Approach in 2007 but, at the same time, is working towards incorporating the best credit risk practices under the Advanced Internal Rating Based (IRB) Approach.

To this end, the Group has already established a steering committee, comprising senior management from its business, risk management and information technology areas, to oversee the progress of its Basel II efforts. A number of working groups have been set up to identify requirements and progressively implement changes to systems and processes so as to meet the requirements under the Advanced IRB Approach. The Group has also engaged consultants with expertise in the relevant fields to provide advice on best practices in advanced credit risk management.

Customer loans

Loans and advances are made to customers in various industry segments and business lines. The top 20 obligor group borrowers and top 100 group borrowers made up 17.0% and 27.4% of total loans and advances respectively.

Obligor groups are defined in accordance with Notice to Banks, MAS 623 to comply with Section 29 (1)(a) of the Banking Act. Where the parent company is a borrower, exposures to the parent company and companies that it has 20% or more shareholding or power to control are aggregated into a single obligor group.

As at 31 December 2003, 39.0% of the Group's exposure was in its personal financial services portfolio, comprising mainly housing loans, other mortgage loans, credit cards and vehicle financing. The balance of the exposure was spread among various industry segments.

The composition of loans and advances and contingent liabilities to customers as at 31 December was as follows:

	Loans & advances			Contingent liabilities		
By industry type (%)	2003	2002	2001	2003	2002	2001
Transport, storage and communication	**3.4**	3.3	3.6	**1.9**	2.8	3.5
Building and construction	**11.7**	14.7	15.1	**17.2**	17.4	22.8
Manufacturing	**9.4**	8.6	8.3	**8.4**	10.3	11.9
Non-bank financial institutions	**16.6**	17.3	16.8	**46.3**	45.5	30.6
General commerce	**9.8**	10.0	9.8	**15.7**	13.2	13.6
Professionals and private individuals	**15.4**	15.0	14.8	**2.6**	2.7	2.7
Housing loans	**23.6**	22.2	20.7	**–**	–	–
Other	**10.1**	8.9	10.9	**7.9**	8.1	14.9
Total (%)	**100.0**	100.0	100.0	**100.0**	100.0	100.0
Total ($ million)	**62,581**	62,339	64,211	**8,544**	8,682	7,673

Classification and provision of loans

The Group classifies its loan portfolios according to the borrower's ability to repay the loan from its normal source of income. All loans and advances to customers are classified into the categories of 'Pass', 'Special Mention' or 'Non-Performing'. Non-Performing Loans are further classified as 'Substandard', 'Doubtful' or 'Loss' in accordance with Notice to Banks, MAS 612. The Group also practises split classifications of 'Substandard – Doubtful' and 'Substandard – Loss', whereby 'Substandard' is the secured portion. Interest income on all Non-Performing Loans is suspended and ceases to accrue. Such loans will remain classified until servicing of the account becomes satisfactory. Where appropriate, classified loans are transferred to in-house recovery specialists to maximise recovery prospects.

Loan classification	Description
Pass	All payments are current and full repayment of interest and principal from normal sources is not in doubt.
Special Mention	There is some potential weakness in the borrower's creditworthiness, but the extent of any credit deterioration does not warrant its classification as a Non-Performing Loan.
Non-Performing: Substandard	There is weakness in the borrower's creditworthiness that jeopardises normal repayment. Default has occurred or is likely to occur. The loan is more than 90 days past due, or the repayment schedule has been restructured.
Non-Performing: Substandard – Doubtful	The loan is partially secured by tangible collateral and the recovery rate on the unsecured portion is expected to be more than 50%.
Non-Performing: Substandard – Loss	The loan is partially secured by tangible collateral and the recovery rate on the unsecured portion is expected to be less than 50%.
Non-Performing: Doubtful	There is severe weakness in the borrower's creditworthiness, full repayment is highly questionable and no collateral is available.
Non-Performing: Loss	The chance of recovery from the loan is insignificant and no collateral is available.

The Group's provisions for credit losses are intended to cover probable credit losses through charges against profit. The provisions consist of an element that is specific to the individual loan and also a general element that has not been specifically identified to individual loans. The Group constantly reviews the quality of its loan portfolio based on its knowledge of the borrowers and, where applicable, of the relevant industry and country of operation.

A specific provision is made when the Group believes that the creditworthiness of a borrower has deteriorated to such an extent that the recovery of the entire outstanding loan is in doubt. The amount of specific provision to be made is based on the difference between the collateral value or discounted cash flows of an impaired loan and the carrying value of that loan.

A general provision is made to cover possible losses and could be used to cushion any losses known from experience to exist in the loan portfolio. In relation to the loan portfolios of its overseas operations, the Group's policy is to make provisions based on local (i.e., the country of domicile of the overseas operation) regulatory requirements for local reporting purposes and then, where necessary, to make additional provisions to comply with the Group's provisioning policy and the Monetary Authority of Singapore (MAS) regulations.

Specific provision is made for each loan grade in the following manner:

Loan classification	Recovery expectation	Provision
Substandard	> 90% to 100%	10% to 50% of any unsecured loan outstanding
Doubtful	50% to 90%	50% to 100% of any unsecured loan outstanding
Loss	< 50%	100% of any unsecured loan outstanding

Loan interest

The classification of a loan as non-performing does not disqualify the Group of its entitlement to interest income. It merely registers the uncertainty faced by the Group in the collection of such interest income. The Group has adopted the approach that once a loan is classified as non-performing, interest will be suspended and will cease to accrue, irrespective of whether any collateral would be adequate to cover such payments.

Write-off

A classified account is written off where there is no realisable tangible collateral securing the account and all feasible avenues of recovery have been exhausted or where the borrower and guarantors have been bankrupted, wound up, and/or proof of debt filed. Approval from MAS must be obtained before director-related loans and other loans, as required under Notice to Banks, MAS 606, can be written off.

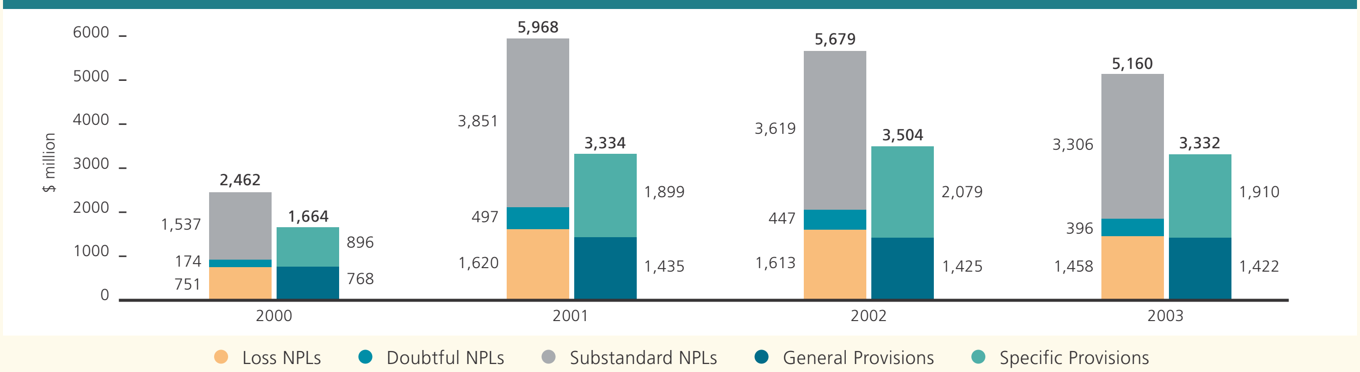
Non-performing loans (NPLs) and cumulative provisions of the Group

Group NPLs fell by $519 million or 9.1% to $5,160 million as at 31 December 2003, compared to $5,679 million as at 31 December 2002. Singapore and the Five Regional Countries* were the main contributors to the drop in NPLs. Correspondingly, Group NPLs (excluding debt securities) as a percentage of gross customer loans decreased by 0.9% point, from 9.0% as at 31 December 2002 to 8.1% as at 31 December 2003. Of the total Group NPLs of $5,160 million, $3,306 million or 64.1% was in the Substandard category. The lower level of NPLs was recorded despite a year marked by high unemployment levels in Singapore, the outbreak of Severe Acute Respiratory Syndrome (SARS) and acts of terrorism. Improvement is expected to continue in the light of the improving economic outlook for Singapore and the regional countries.

In line with the lower NPLs, the Group's specific provisions decreased by $169 million or 8.1% to $1,910 million as at 31 December 2003, compared to $2,079 million as at 31 December 2002. As a result, total cumulative specific and general provisions for the Group decreased by $172 million or 4.9%, from $3,504 million as at 31 December 2002 to $3,332 million as at 31 December 2003. General provisions were $1,422 million or 42.7% of total cumulative provisions as at 31 December 2003. The total cumulative provisions provided 64.6% cover against Group NPLs. For NPLs classified as Doubtful and Loss, the provision coverage stood at 179.7%.

The Group's NPLs by loan classification and cumulative specific and general provisions as at 31 December were as follows:

Non-performing loans and cumulative provisions of the Group



* *Comprising Malaysia, Indonesia, the Philippines, Thailand and South Korea.*

Ratios (%)	2003	2002	2001	2000
NPLs*/Gross customer loans	**8.1**	9.0	9.3	7.8
NPLs+/Gross customer loans and debt securities	**7.7**	8.7	9.0	7.6
NPLs/Total assets	**4.5**	5.3	5.2	3.7
Cumulative provisions/NPLs	**64.6**	61.7	55.9	67.6
Cumulative provisions/Doubtful & Loss NPLs	**179.7**	170.1	157.5	179.9
Cumulative provisions/Unsecured NPLs	**141.4**	138.3	136.6	136.6
Cumulative provisions*/Gross customer loans	**5.2**	5.5	5.2	5.2
General provisions/Gross customer loans (net of specific provisions* for loans)	**2.3**	2.4	2.3	2.5

* *Excluding debt securities.*

\+ *Including debt securities.*

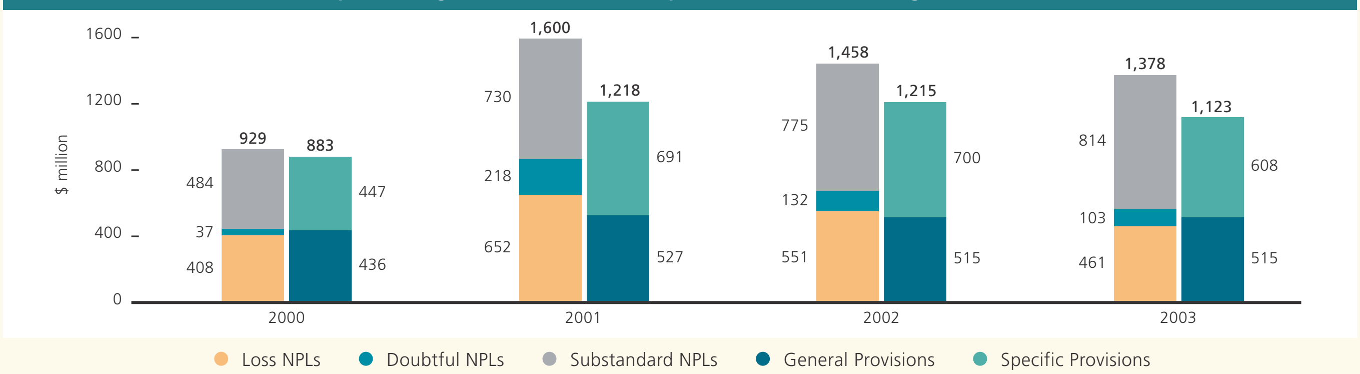
Group NPLs and cumulative provisions of the Five Regional Countries

NPLs of the Five Regional Countries decreased by 5.5% to $1,378 million as at 31 December 2003 from $1,458 million as at 31 December 2002. NPLs as a percentage of gross exposure to the region dropped to 6.7%, compared to 8.9% as at 31 December 2002.

Cumulative specific and general provisions for the Five Regional Countries stood at $1,123 million as at 31 December 2003. This was 7.6% lower than the provisions of $1,215 million as at 31 December 2002. The cumulative provisions represented 81.5% of the total NPLs of the Five Regional Countries and 199.1% of the NPLs of the Five Regional Countries that were classified as Doubtful and Loss.

General provisions were $515 million (31 December 2002: $515 million) against specific provisions of $608 million (31 December 2002: $700 million).

Non-performing loans and cumulative provisions of the Five Regional Countries



Ratios (%)	2003	2002	2001	2000
NPLs*/Gross customer loans	**14.1**	17.0	19.2	22.2
NPLs+/Gross customer loans and debt securities	**13.4**	16.6	18.0	20.0
Cumulative provisions/NPLs	**81.5**	83.3	76.1	95.0
Cumulative provisions/Doubtful & Loss NPLs	**199.1**	177.9	140.0	198.4
Cumulative provisions*/Gross customer loans	**11.5**	14.1	14.7	21.1
General provisions/Gross customer loans (net of specific provisions* for loans)	**5.7**	6.6	7.0	11.7
NPLs/Gross exposure to the Five Regional Countries	**6.7**	8.9	8.9	9.1

* *Excluding debt securities.*

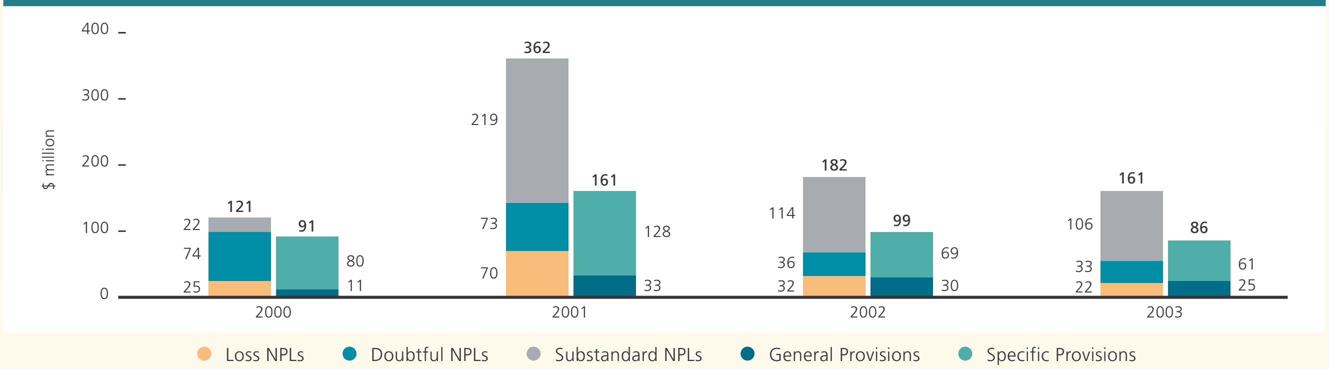
\+ *Including debt securities.*

Group NPLs and cumulative provisions of Greater China

As at 31 December 2003, Group NPLs of Greater China fell by $21 million or 11.5% to $161 million from $182 million as at 31 December 2002. Correspondingly, NPLs as a percentage of gross exposure to Greater China dropped to 1.7%, compared to 2.4% as at 31 December 2002.

Group cumulative specific and general provisions for Greater China were $86 million as at 31 December 2003 against $99 million as at 31 December 2002. The NPLs of Greater China were 53.4% covered by cumulative provisions. NPLs classified as Doubtful and Loss were 156.4% covered by cumulative provisions.

Non-performing loans and cumulative provisions of Greater China



Ratios (%)	2003	2002	2001	2000
NPLs*/Gross customer loans	**8.2**	7.3	12.4	11.5
NPLs+/Gross customer loans and debt securities	**7.4**	6.1	10.7	10.3
Cumulative provisions/NPLs	**53.4**	54.4	44.5	75.2
Cumulative provisions/Doubtful & Loss NPLs	**156.4**	145.6	112.6	91.9
Cumulative provisions*/Gross customer loans	**4.4**	4.0	5.5	8.6
General provisions/Gross customer loans (net of specific provisions* for loans)	**1.3**	1.2	1.2	1.1
NPLs/Gross exposure to Greater China	**1.7**	2.4	5.7	4.5

* *Excluding debt securities.*

\+ *Including debt securities.*

Group NPLs by region

The 9.1% drop in Group NPLs was primarily due to the lower NPLs of Singapore and the Five Regional Countries. As at 31 December 2003, Singapore and the Five Regional Countries accounted for 68.4% and 26.7% of Group NPLs respectively, compared to 69.3% for Singapore and 25.7% for the Five Regional Countries as at 31 December 2002.

$ million	2003	2002	2001	2000
Singapore	**3,530**	3,935	3,819	1,354
Malaysia	**930**	943	1,028	528
Indonesia	**119**	156	169	119
Philippines	**184**	208	242	181
Thailand	**140**	144	151	101
South Korea	**5**	7	10	–
Five Regional Countries	**1,378**	1,458	1,600	929
Greater China	**161**	182	362	121
Other	**91**	104	187	58
Group total	**5,160**	5,679	5,968	2,462

Group NPLs by industry

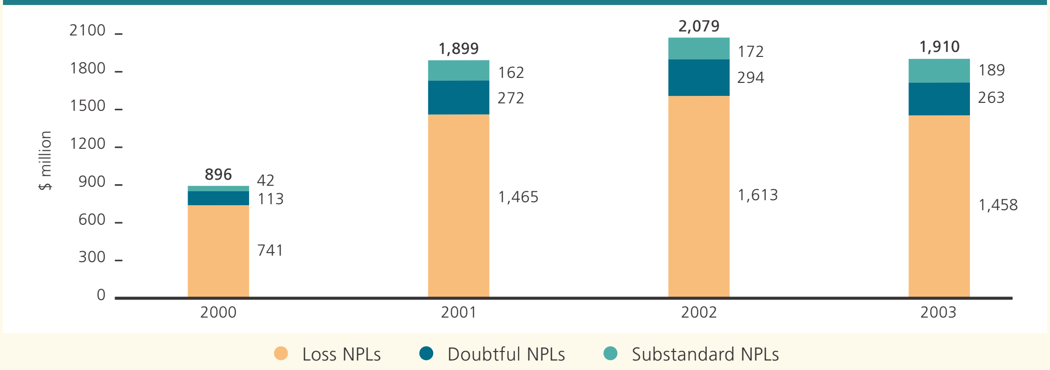
Group NPLs by industry as at 31 December were as follows:

Industry type	2003 Amount ($ million)	2003 As % of gross customer loans	2002 Amount ($ million)	2002 As % of gross customer loans	2001 Amount ($ million)	2001 As % of gross customer loans	2000 Amount ($ million)	2000 As % of gross customer loans
Transport, storage and communication	**105**	**5.0**	124	6.0	99	4.3	66	9.3
Building and construction	**756**	**10.3**	843	9.2	1,163	12.0	243	6.8
Manufacturing	**745**	**12.7**	874	16.2	895	16.8	312	10.5
Non-bank financial institutions	**984**	**9.5**	1,029	9.5	1,022	9.5	447	9.0
General commerce	**702**	**11.4**	769	12.4	825	13.1	569	14.8
Professionals and private individuals	**926**	**9.6**	1,014	10.9	939	9.9	408	9.7
Housing loans	**632**	**4.3**	668	4.8	556	4.2	272	3.6
Other	**231**	**3.7**	294	5.3	445	6.4	145	3.8
Sub-total	**5,081**	**8.1**	5,615	9.0	5,944	9.3	2,462	7.8
Debt securities	**79**		64		24		–	
Total	**5,160**		5,679		5,968		2,462	

Group specific provisions by loan classification

About 76.3% of specific provisions made for expected loan losses was for 'Loss' accounts. The specific provisions for each classified loan grade as at 31 December are shown in the following chart:

Specific provisions by loan classification



Group specific provisions by region

The Group's specific provisions were $1,910 million as at 31 December 2003, or 8.1% lower than that of $2,079 million as at 31 December 2002. Singapore and the Five Regional Countries accounted for 62.8% and 31.8% respectively of the Group's total specific provisions as at 31 December 2003, compared to 61.1% for Singapore and 33.7% for the Five Regional Countries as at 31 December 2002.

$ million	2003	2002	2001	2000
Singapore	**1,200**	1,271	1,037	353
Malaysia	**383**	428	439	242
Indonesia	**78**	111	88	87
Philippines	**76**	72	72	55
Thailand	**69**	87	88	63
South Korea	**2**	2	4	–
Five Regional Countries	**608**	700	691	447
Greater China	**61**	69	128	80
Other	**41**	39	43	16
Specific provisions for the Group	**1,910**	2,079	1,899	896
General provisions for the Group	**1,422**	1,425	1,435	768
Total	**3,332**	3,504	3,334	1,664

Group specific provisions by industry

$ million	2003	2002	2001	2000
Transport, storage and communication	**44**	35	28	29
Building and construction	**275**	369	336	104
Manufacturing	**352**	398	370	160
Non-bank financial institutions	**319**	309	308	145
General commerce	**300**	309	305	245
Professionals and private individuals	**360**	329	296	151
Housing loans	**98**	143	80	23
Other	**114**	138	161	39
Sub-total	**1,862**	2,030	1,884	896
Debt securities	**48**	49	15	–
Total	**1,910**	2,079	1,899	896

Rescheduled and restructured accounts

A rescheduled account is one where repayment terms have been modified, but the principal terms and conditions of the original contract have not changed significantly. This is done to alleviate a temporary cash flow difficulty experienced by a borrower. It is expected that the problem is short-term and not likely to recur. The full amount of the debt is still repayable and no loss of principal or interest is expected.

When an account has been rescheduled three months before it meets the criteria for auto-classification, the account can be graded as 'Performing'. However, if the rescheduling takes place after the account has been graded as 'Non-Performing', it remains as such and is upgraded to 'Pass' after six months provided there are no excesses and past dues.

A restructured account is one where the original terms and conditions of the facilities have been modified significantly to assist the borrower to overcome financial difficulties where the longer-term prospect of the business or project is still deemed to be viable. A restructuring exercise could encompass a change in the credit facility type, or in the repayment schedule including moratorium, or extension of interest and/or principal payment and reduction of accrued interest, including forgiveness of interest and/or reduction in interest rate charged.

When an account has been restructured based on financial consideration, the account will be graded as 'Non-Performing'. It can only be upgraded to 'Pass' after six months when all payments are current in terms of the restructured terms and conditions and there is no reasonable doubt as to the ultimate collectability of principal and interest.

Loans that were classified and restructured during the year were as follows:

	2003		2002		2001		2000	
$ million	Amount	Specific provisions	Amount	Specific provisions	Amount	Specific provisions	Amount	Specific provisions
Substandard	**196**	**31**	292	9	176	8	17	1
Doubtful	**–**	**–**	29	13	115	42	–	–
Loss	**35**	**35**	37	36	65	57	4	4
Total	**231**	**66**	358	58	356	107	21	5

Ageing of NPLs

The full outstanding balance of an account is deemed non-current and aged when there are arrears in interest servicing or principal repayment. The ageing of NPLs as at 31 December was as follows:

	2003		2002		2001		2000	
Ageing (Days)	Amount ($ million)	% of total NPLs	Amount ($ million)	% of total NPLs	Amount ($ million)	% of total NPLs	Amount ($ million)	% of total NPLs
Current	**670**	**13.0**	774	13.6	925	15.5	177	7.2
A 90	**378**	**7.3**	473	8.3	874	14.6	280	11.4
91 to 180	**464**	**9.0**	789	13.9	547	9.2	220	8.9
B 181	**3,648**	**70.7**	3,643	64.2	3,622	60.7	1,785	72.5
Total	**5,160**	**100.0**	5,679	100.0	5,968	100.0	2,462	100.0

Accounts that have payment records that are current or A 90 days past due and/or in excess may be classified as 'Non-Performing' if the borrowers are deemed to be financially weak.

Collateral types

The majority of the classified loans are secured by properties in Singapore. Properties are valued at forced sale value and such valuations are updated semi-annually. NPLs are also secured by other types of collateral such as marketable securities that include listed stocks and shares, cash and deposits, and bankers' standby letters of credit/guarantees.

As at 31 December 2003, 54.3% of total Group NPLs was secured by collateral, compared to 55.4% as at 31 December 2002.

Secured/unsecured NPLs

	2003		2002		2001		2000	
	Amount ($ million)	% of total NPLs	Amount ($ million)	% of total NPLs	Amount ($ million)	% of total NPLs	Amount ($ million)	% of total NPLs
Group NPLs								
Secured	**2,804**	**54.3**	3,146	55.4	3,528	59.1	1,244	50.5
Unsecured	**2,356**	**45.7**	2,533	44.6	2,440	40.9	1,218	49.5
Total	**5,160**	**100.0**	5,679	100.0	5,968	100.0	2,462	100.0

The secured NPLs of the Group by collateral type and based on country of risk as at 31 December were as follows:

$ million	Properties	Marketable securities	Cash and deposits	Other	Total
2003					
Singapore	**1,883**	**51**	**16**	**78**	**2,028**
Five Regional Countries	**579**	**69**	**9**	**41**	**698**
Greater China	**44**	**1**	**2**	**–**	**47**
Other	**30**	**–**	**–**	**1**	**31**
Total	**2,536**	**121**	**27**	**120**	**2,804**
2002					
Singapore	2,067	86	36	135	2,324
Five Regional Countries	569	102	2	43	716
Greater China	61	2	–	–	63
Other	43	–	–	–	43
Total	2,740	190	38	178	3,146
2001					
Singapore	2,282	136	14	64	2,496
Five Regional Countries	643	97	3	45	788
Greater China	109	11	–	11	131
Other	111	–	2	–	113
Total	3,145	244	19	120	3,528
2000					
Singapore	770	37	9	34	850
Five Regional Countries	324	19	1	17	361
Greater China	9	10	–	–	19
Other	13	1	–	–	14
Total	1,116	67	10	51	1,244

Country risk

International lending involves additional risks compared to domestic lending in that there may be impediments arising from events in a foreign country that prevent repayment of the foreign borrowers' obligations to the Group. Such events may affect all borrowers of the same country. As such, it is important to set limits to safeguard various facets of the Group's exposures to any single country.

To facilitate country exposure monitoring and analysis, all exposures to a particular country, whether booked in or outside of that particular country, are aggregated. The exposure may be in the form of actual assets such as investments, real estate and loan assets, contingent exposures like letters of credit and guarantees, other off-balance sheet exposures like foreign exchange contracts and interest rate/currency swaps, or collateral/guarantees located in the country to secure exposures booked in another country.

Cross-border exposure is the summation of all country exposures, including intra-group exposures, but excludes locally funded facilities provided by the Group's branches/subsidiaries to local borrowers/counter-parties or where the residual risks remain within a country.

Setting of country/cross-border limits

The review of country and cross-border risk by Risk Management & Compliance sector – Credit & Country Risk Management, is managed through a system of country and cross-border limits that relies on ratings by external rating agencies and gradings by internal country/business managers. The latter is based on various quantitative key indicators as well as qualitative factors relating to each country's economic, social and political circumstances. A composite score is then derived and applied to a standard in-house scale to obtain a numeric rating for the country. This numeric rating is used to determine the appropriate limits based on a risk scale that curtails limits to countries where the Group does not have a presence. The limit setting process also takes into account the size of the Bank's capital funds, the perceived economic strength and stability of the country of exposure, and the assessment of the Group's portfolio spread and risk appetite.

Mitigation of country/cross-border risk

Country and cross-border limits are imposed with the aim of avoiding the concentration of transfer, economic or political risks. These limits are reviewed regularly. Reports on country and cross-border exposure are presented to the Credit Committee at least four times a year. Limits may be reviewed and business strategies revised as and when deemed necessary, based on updates by country managers and/or business development managers together with an assessment of current events and developments for each country. The country/cross-border risk ceiling is the primary limit for all transactions across all counter-parties. Extension of credit may thus be denied where a country/cross-border risk ceiling is reached although sufficient counter-party limits are available.

Group exposure by country of operations

The Group's total direct exposure to the countries (outside Singapore) in which it has a presence amounted to $37.1 billion or 32.7% of Group total assets as at 31 December 2003, compared to $28.5 billion or 26.5% of Group total assets as at 31 December 2002. Exposure reported below (excluding contingent liabilities) is categorised into loans and advances to customers, balances due from governments, balances due from banks and investments.

Exposure to the Five Regional Countries, Greater China and Other Countries outside Singapore

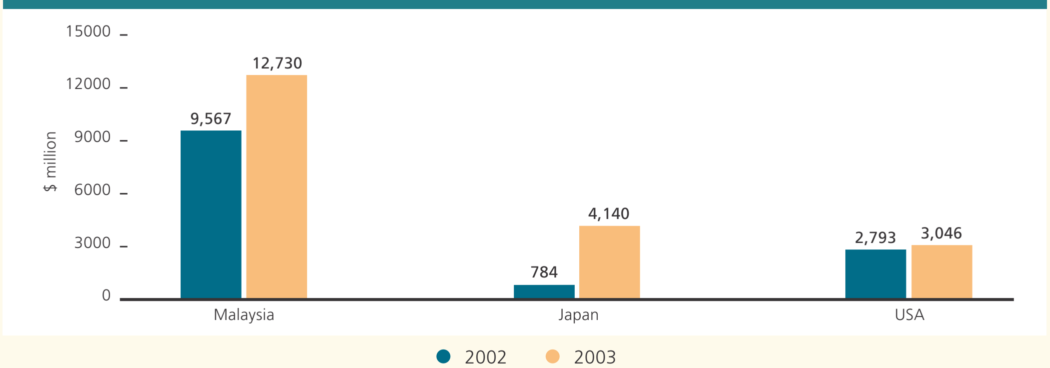
$ million	Loans and debt securities: Non-bank	Loans and debt securities: Government	Loans and debt securities: Bank	Investments	Total	Less: Loans/ investments in subsidiaries & branches	Net exposure: Total	Net exposure: % of Group total assets	Contingent liabilities
Malaysia									
2003	**6,624**	**3,353**	**4,307**	**742**	**15,026**	**2,296**	**12,730**	**11.2**	**1,067**
2002	6,164	1,990	2,381	531	11,066	1,499	9,567	8.9	1,032
2001	6,493	2,188	2,571	740	11,992	2,017	9,975	8.8	864
Indonesia									
2003	**491**	**165**	**48**	**79**	**783**	**50**	**733**	**0.7**	**132**
2002	444	127	106	67	744	50	694	0.6	67
2001	331	118	155	55	659	75	584	0.5	27
Philippines									
2003	**241**	**221**	**53**	**12**	**527**	**41**	**486**	**0.4**	**60**
2002	254	225	44	9	532	31	501	0.5	56
2001	300	277	46	33	656	65	591	0.5	6
Thailand									
2003	**1,642**	**523**	**112**	**244**	**2,521**	**156**	**2,365**	**2.1**	**332**
2002	1,178	814	112	203	2,307	185	2,122	2.0	285
2001	1,026	1,617	567	261	3,471	594	2,877	2.5	180
South Korea									
2003	**41**	**596**	**825**	**209**	**1,671**	**–**	**1,671**	**1.5**	**173**
2002	45	298	1,354	98	1,795	12	1,783	1.7	253
2001	57	82	888	174	1,201	140	1,061	0.9	229
Total Regional Countries									
2003	**9,039**	**4,858**	**5,345**	**1,286**	**20,528**	**2,543**	**17,985**	**15.9**	**1,764**
2002	8,085	3,454	3,997	908	16,444	1,777	14,667	13.7	1,693
2001	8,207	4,282	4,227	1,263	17,979	2,891	15,088	13.2	1,306
Greater China									
2003	**1,968**	**1,038**	**5,943**	**352**	**9,301**	**3,340**	**5,961**	**5.2**	**639**
2002	2,482	233	4,311	648	7,674	2,536	5,138	4.8	504
2001	2,912	135	2,740	590	6,377	1,904	4,473	3.9	446
Other OECD									
2003	**5,494**	**3,059**	**5,355**	**1,129**	**15,037**	**2,076**	**12,961**	**11.4**	**911**
2002	4,847	105	4,647	716	10,315	1,860	8,455	7.8	878
2001	4,652	49	6,102	604	11,407	1,307	10,100	8.9	734
Other									
2003	**166**	**17**	**53**	**1**	**237**	**12**	**225**	**0.2**	**65**
2002	154	11	35	4	204	4	200	0.2	47
2001	187	12	44	1	244	4	240	0.2	27
Grand total									
2003	**16,667**	**8,972**	**16,696**	**2,768**	**45,103**	**7,971**	**37,132**	**32.7**	**3,379**
2002	15,568	3,803	12,990	2,276	34,637	6,177	28,460	26.5	3,122
2001	15,958	4,478	13,113	2,458	36,007	6,106	29,901	26.2	2,513

Included in investments as at 31 December 2003 was an amount of $174 million, compared to $234 million as at 31 December 2002 that related to the dealing of debt and equity securities. Dealing and non-dealing securities as at 31 December were as follows:

$ million	2003 Dealing	2003 Non-dealing	2003 Investments	2002 Dealing	2002 Non-dealing	2002 Investments
Malaysia	**14**	**728**	**742**	152	379	531
Indonesia	**4**	**75**	**79**	–	67	67
Philippines	**9**	**3**	**12**	1	8	9
Thailand	**32**	**212**	**244**	25	178	203
South Korea	**68**	**141**	**209**	12	86	98
Five Regional Countries	**127**	**1,159**	**1,286**	190	718	908
Greater China	**27**	**325**	**352**	36	612	648
Other OECD	**20**	**1,109**	**1,129**	8	708	716
Other	**–**	**1**	**1**	–	4	4
Total	**174**	**2,594**	**2,768**	234	2,042	2,276

At the country level, the largest exposure was to Malaysia where the Group has a long-standing presence – $12.7 billion or 11.2% of Group total assets as at 31 December 2003 against $9.6 billion or 8.9% of Group total assets as at 31 December 2002. The second largest exposure was to Japan, amounting to $4.1 billion or 3.6% of Group total assets.

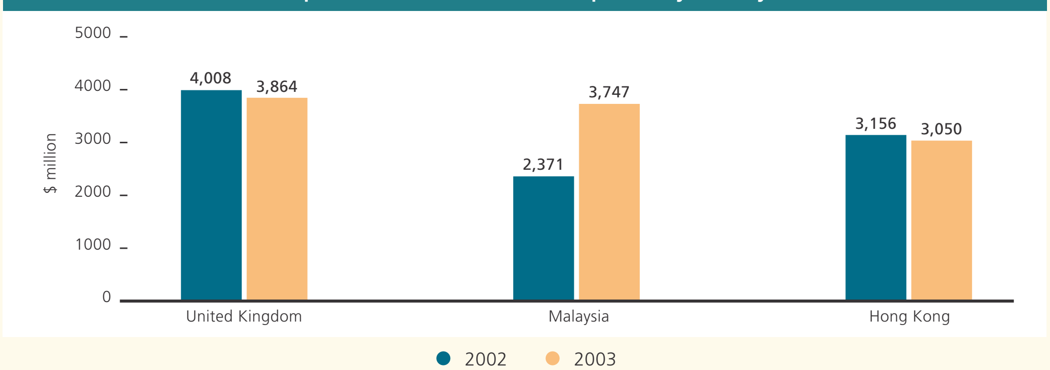
Top three direct exposure by country of operations



Group cross-border exposure

As at 31 December 2003, total direct cross-border exposure to the countries where the Group has a presence amounted to $22.7 billion, compared to $18.9 billion as at 31 December 2002. The top three direct cross-border exposures were to United Kingdom, Malaysia and Hong Kong.

Top three direct cross-border exposure by country



Cross-border exposure to the Five Regional Countries, Greater China and Other Countries outside Singapore

$ million	Loans and debt securities: Non-bank	Government	Bank	Investments	Intra-Group	Net exposure: Total	% of Group total assets
Malaysia							
2003	**192**	**34**	**826**	**465**	**2,230**	**3,747**	**3.3**
2002	130	35	471	342	1,393	2,371	2.2
2001	125	121	442	614	1,679	2,981	2.6
Indonesia							
2003	**227**	**–**	**47**	**80**	**82**	**436**	**0.4**
2002	226	–	99	67	71	463	0.4
2001	133	–	108	56	41	338	0.3
Philippines							
2003	**–**	**15**	**4**	**12**	**42**	**73**	**0.1**
2002	9	16	4	9	34	72	0.1
2001	18	17	10	33	36	114	0.1
Thailand							
2003	**100**	**–**	**91**	**232**	**49**	**472**	**0.4**
2002	114	–	44	155	80	393	0.4
2001	136	–	45	231	508	920	0.8
South Korea							
2003	**31**	**–**	**989**	**202**	**27**	**1,249**	**1.1**
2002	36	–	1,116	91	38	1,281	1.2
2001	49	–	595	165	170	979	0.9
Total Regional Countries							
2003	**550**	**49**	**1,957**	**991**	**2,430**	**5,977**	**5.3**
2002	515	51	1,734	664	1,616	4,580	4.3
2001	461	138	1,200	1,099	2,434	5,332	4.7
Greater China							
2003	**577**	**–**	**2,824**	**111**	**3,553**	**7,065**	**6.2**
2002	651	–	1,573	180	2,868	5,272	4.9
2001	753	–	1,102	170	2,232	4,257	3.7
Other OECD							
2003	**841**	**7**	**5,310**	**861**	**2,517**	**9,536**	**8.4**
2002	420	7	5,901	371	2,238	8,937	8.3
2001	274	7	11,021	364	1,448	13,114	11.5
Other							
2003	**–**	**–**	**10**	**1**	**110**	**121**	**0.1**
2002	–	–	4	4	101	109	0.1
2001	23	–	24	1	100	148	0.1
Grand total							
2003	**1,968**	**56**	**10,101**	**1,964**	**8,610**	**22,699**	**20.0**
2002	1,586	58	9,212	1,219	6,823	18,898	17.6
2001	1,511	145	13,347	1,634	6,214	22,851	20.0

Balance Sheet Risk Management

Balance sheet risk is defined as the potential change in earnings arising from the effect of movements in interest rates and foreign exchange rates on the structural banking book of the Group that is not of a trading nature.

The Asset Liability Committee (ALCO), under delegated authority from the Board of Directors, approves policies, strategies and limits in relation to the management of structural balance sheet risk exposures. This risk is monitored and managed within a framework of approved policies and advisory limits by Risk Management & Compliance sector – Asset Liability Management and is reported monthly to ALCO. The decisions of ALCO and its monthly risk management reports are reviewed by the Executive Committee of the Board and by the Board of Directors. On a tactical level, Global Treasury – Asset Liability Management is responsible for the effective management of the balance sheet risk in the banking book in accordance with the Group's approved balance sheet risk management policies.

In carrying out its business activities, the Group strives to meet customers' demands and preferences for products with various interest rate structures and maturities. Sensitivity to interest rate movements arises from mismatches in the repricing dates, cash flows and other characteristics of assets and liabilities. As interest rates and yield curves change over time, the size and nature of these mismatches may result in a gain or loss in earnings. In managing balance sheet risk, the primary objective, therefore, is to monitor and avert significant volatility in Net Interest Income (NII) and Economic Value of Equity (EVE). For instance, when there are significant changes in market interest rates, the Group will adjust its lending and deposit rates to the extent necessary to stabilise its NII.

The balance sheet interest rate risk exposure is quantified using a combination of dynamic simulation modelling techniques and static analysis tools, such as maturity/repricing schedules. The schedules provide a static indication of the potential impact on interest earnings through gap analysis of the mismatches of interest rate sensitive assets, liabilities and off-balance sheet items by time bands, according to their maturity (for fixed rate items) or the remaining period to their next repricing (for floating rate items).

In general, interest rate risk will arise when more assets/liabilities than liabilities/assets are repriced in a given time band of a repricing schedule. A positive interest rate sensitivity gap exists where more interest sensitive assets than interest sensitive liabilities reprice during a given time period. This tends to benefit NII when interest rates are rising. Conversely, a negative interest rate sensitivity gap exists where more interest sensitive liabilities than interest sensitive assets reprice during a given time period. This tends to benefit NII when interest rates are falling. Interest rate sensitivity may also vary across repricing periods and among the currencies in which the Group has positions. The table in Note 43(c) to the financial statements represents the Group's interest rate risk sensitivity based on repricing mismatches as at 31 December 2003. The Group had an overall positive interest rate sensitivity gap of $9,314 million, which represents the net difference in the interest rate sensitive assets and liabilities across the time periods. The actual effect on NII will depend on a number of factors, including variations in interest rates within the repricing periods, variations among currencies, and the extent to which repayments are made earlier or later than the contracted dates. The interest rate repricing profile, which includes lending, funding and liquidity activities, typically leads to a negative interest rate sensitivity gap in the shorter term.

Complementing the static analysis is the dynamic simulation modelling process. In this process, the Group applies both the earnings and EVE approaches to measuring interest rate risk. The potential effects of changes in interest rates on NII are estimated by simulating the future course of interest rates, expected changes in the Group's business activities over time, as well as the effect of embedded options in the form of loans subject to prepayment and of deposits subject to preupliftment. The changes in interest rates include the simulation of changes in the shape of the yield curve, high and low rates, and implied forward interest rates.

EVE is simply the present value of the Group's assets less the present value of the Group's liabilities, currently held by the Group. In EVE sensitivity simulation modelling, the present values for all the Group's cash flows are computed, with the focus on changes in EVE under various interest rate environments. This economic perspective measures interest rate risk across the entire time spectrum of the balance sheet, including off-balance sheet items.

Stress testing is also performed regularly on balance sheet risk to determine the sensitivity of the Group's capital to the impact of more extreme interest rate movements. This stress testing is conducted to assess that even under more extreme market movements, for example, the Asian financial crisis, the Group's capital will not deteriorate beyond its approved risk tolerance. Such tests are also performed to provide early warning of potential worst-case losses so as to facilitate proactive management of these risks in the rapidly changing financial markets. The results of such stress testing are presented to ALCO, the Executive Committee of the Board and the Board of Directors.

The risks arising from the trading book in interest rates, foreign exchange rates and equity prices are managed and controlled under the market risk framework that is discussed under the section 'Market Risk Management' on pages 46 to 49.

Liquidity Risk Management

Liquidity risk is defined as the potential loss arising from the Group's inability to meet its contractual obligations when due. Liquidity risk arises in the general funding of the Group's activities and in the management of its assets and liabilities, including off-balance sheet items. The Group maintains sufficient liquidity to fund its day-to-day operations, meet customer deposit withdrawals either on demand or at contractual maturity, meet customers' demand for new loans, participate in new investments when opportunities arise, and repay borrowings as they mature. Hence, liquidity is managed to meet known as well as unanticipated cash funding needs.

Liquidity risk is managed within a framework of liquidity policies, controls and limits approved by ALCO. These policies, controls and limits ensure that the Group maintains well-diversified sources of funding, as well as sufficient liquidity to meet all its contractual obligations when due. The distribution of sources and maturities of deposits is managed actively in order to ensure cost-effective and continued access to funds and to avoid a concentration of funding needs from any one source. Important factors in assuring liquidity are competitive pricing in interest rates and the maintenance of customers' confidence. Such confidence is founded on the Group's good reputation, the strength of its earnings, and its strong financial position and credit rating.

The management of liquidity risk is carried out throughout the year by a combination of cash flow management, maintenance of high-quality marketable securities and other short-term investments that can be readily converted to cash, diversification of the funding base, and proactive management of the Group's 'core deposits'. 'Core deposits' is a major source of liquidity for the Group. These 'core deposits' are generally stable non-bank deposits, like current accounts, savings accounts and fixed deposits. The Group monitors the stability of its 'core deposits' by analysing their volatility over time.

In accordance with the regulatory liquidity risk management framework, liquidity risk is measured and managed on a projected cash flow basis. The Group is required to monitor liquidity under 'business as usual' and 'bank-specific crisis' scenarios. Liquidity cash flow mismatch limits have been established to limit the Group's liquidity exposure. The Group has also identified certain early warning indicators and established the trigger points for possible contingency situations. These early warning indicators are monitored closely so that immediate action can be taken. On a tactical daily liquidity management level, Global Treasury – Asset Liability Management is responsible for effectively managing the overall liquidity cash flows in accordance with the Group's approved liquidity risk management policies and limits.

Liquidity contingency funding plans have been drawn up to ensure that alternative funding strategies are in place and can be implemented on a timely basis to minimise the liquidity risks that may arise upon the occurrence of a bank-specific crisis or dramatic change in market conditions. Under the plans, a team comprising senior management and representatives from all relevant units will direct the business units to take certain specified actions to create liquidity and continuous funding for the Group's operations.

Overseas banking branches and subsidiaries must comply with their local regulatory requirements with regards to liquidity and will operate on being self-sufficient in funding capabilities, whenever possible. However, the Group's Head Office in Singapore will provide funding to them on an exceptional basis, for instance, during a stressed liquidity crisis when they are unable to borrow sufficient funds for their operational needs or when it is cheaper to fund through Head Office.

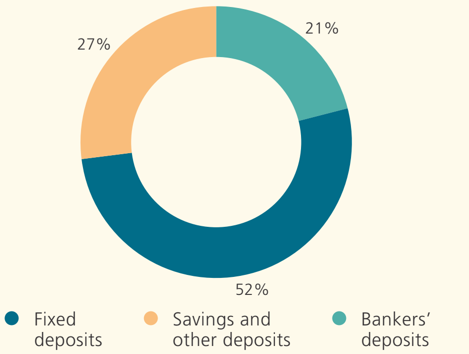
The table in Note 43(d) to the financial statements shows the maturity mismatch analysis of the Group's nearer and longer-term time bands relating to the cash inflows and outflows based on contractual classifications arising from business activities. The projected net cash outflow in the 'Up to 7 days' time band comprises mainly customers' current accounts and savings accounts that are repayable on demand. However, if these customer deposits are adjusted for behavioural characteristics, the projected net cash outflow in the 'Up to 7 days' time band is very much reduced as they are adjusted out to the longer-term time bands due to the stable nature of these customer deposits.

Sources of deposits

The Group has access to diverse funding sources. Liquidity is provided by a variety of both short-term and long-term instruments. The diversity of funding sources enhances funding flexibility, limits dependence on any one source of funds, and generally lowers the overall cost of funds. In making funding decisions, management considers market conditions, prevailing interest rates, liquidity needs, and the desired maturity profile of the Group's liabilities.

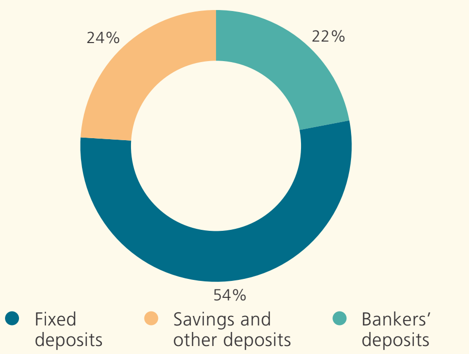
Non-bank customers' fixed deposits, savings and other deposits continued to form a significant part of the Group's overall funding base in the year under review. As at 31 December 2003, these customer deposits amounted to $69,863 million and accounted for 79% of total Group deposits. Bankers' deposits, on the other hand, amounted to $18,839 million and formed the remaining 21% of total Group deposits. In terms of deposit mix, fixed deposits comprised the majority of the funding base at 52%, followed by savings and other deposits at 27%. Bankers' deposits are also used by the Group to capitalise on money market opportunities and to maintain a presence in the inter-bank money markets.

Sources of deposits – 2003



Sources of deposits	$ million	%
Customer deposits		
Fixed deposits	**45,801**	**52**
Savings and other deposits	**24,062**	**27**
	69,863	**79**
Bankers' deposits	**18,839**	**21**
Total deposits	**88,702**	**100**

Sources of deposits – 2002



Sources of deposits	$ million	%
Customer deposits		
Fixed deposits	47,287	54
Savings and other deposits	20,632	24
	67,919	78
Bankers' deposits	19,302	22
Total deposits	87,221	100

Market Risk Management

Market risk is defined as the potential loss in market value of a given portfolio that can be expected to be incurred arising from changes in market prices, namely, interest rates, foreign exchange rates, equity prices, credit spreads and option volatility relating to all the above rates or prices.

The Group is exposed to market risk in its trading portfolio because the values of its trading positions are sensitive to changes in market prices and rates.

Market risk is managed using a framework of market risk management policies and risk control procedures, as well as notional, greeks, risk and loss limits. These limits are proposed by every trading desk/division (including the Group's overseas operations), reviewed by the Risk Management & Compliance sector – Market Risk Management and approved by ALCO annually. ALCO also reviews and approves new limits or changes to existing limits as and when these are proposed. The powers of ALCO are delegated by the Executive Committee of the Board whose powers are, in turn, delegated by the Board of Directors. The monitoring of market risk trading limits and the reporting of any limit excess and ratification are carried out independently by the Business Area Control Unit.

There is no single risk statistic that can reflect all aspects of market risk. The more common approaches are Value-at-Risk (VaR) and stress testing. These risk measures, taken together, provide a more comprehensive view of market risk exposure than any one of them individually. VaR is a measure of the dollar amount of potential loss from adverse market movements under a normal market environment. Statistical models of risk measurement, such as VaR, provide an objective and independent assessment of how much risk is being taken. They also allow consistent and comparable measurement of risks across financial products and portfolios.

Market risk is measured using VaR methodologies, namely, variance-covariance and historical simulation models based on the historical market data changes for the past 260 days within a 95% confidence level and assuming a one-day trading horizon.

The variance-covariance methodology is a parametric approach that assumes returns are normally distributed. Under this methodology, a matrix of historical volatilities and correlations is computed from the past 260 days' market data changes. VaR is then computed by applying these volatilities and correlations to the current portfolio valued at current price levels.

The historical simulation methodology is a non-parametric approach that does not make any underlying assumption about the distribution of returns. The method assumes that actual observed historical changes in market rates, such as interest and foreign exchange rates, reflect future possible changes. It uses historical price changes for the past 260 days to compute the returns of the portfolio and a VaR figure is then obtained from the actual distribution of these returns of the portfolio based on a 95 percentile.

The VaR calculations are performed for all material trading portfolios.

However, there are certain limitations to the VaR methodologies. They do not reflect the extent of potential losses that may occur beyond the 95% confidence level or that may occur for positions that could not be liquidated within the one-day trading horizon. In addition, historical data may not accurately reflect price changes that are likely to occur in the future and all VaR methodologies are dependent on the quality of available market data. Hence, to evaluate the robustness of the VaR model, daily 'back testing' of VaR estimates are conducted against hypothetical losses. This is carried out in accordance with the Group's Back Testing Policy, as approved by ALCO.

To overcome the limitations of VaR as well as to complement VaR, stress and scenario tests are performed on the trading portfolios. These serve to provide early warning of potential worst-case losses so as to facilitate proactive management of these risks in the rapidly changing financial markets. While VaR estimates the Group's exposure to events in normal markets, stress testing discloses the risks under plausible events in abnormal markets. Portfolio stress testing is integral to the market risk management process and, together with VaR, are important components in risk measurement and control tools.

Stress tests are performed in accordance with the Group's Stress Testing Policy, as approved by ALCO. The Group's corporate stress tests are built around changes in market rates and prices that result from pre-specified economic scenarios, such as historical market events as well as hypothetical sensitivity analysis, and assume that no action is taken during the stress event to mitigate risks, reflecting the decreased liquidity that frequently accompanies market shocks.

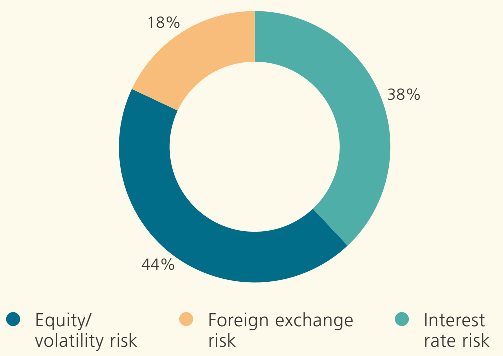
Some examples of stress tests that are performed include daily worst-case VaR based on the worst price changes experienced within the past 260 days and on historical events, for instance, the 1997/1998 Asian financial crisis, the 2000/2001 New Economy crisis and the June – August 2002 Investor Confidence crisis. Hypothetical sensitivity analysis includes parallel yield curve shifts as well as steepening and flattening of yield curves at different pivot tenor points for major trading currencies.

As with VaR, stress test calculations are performed for all material trading portfolios.

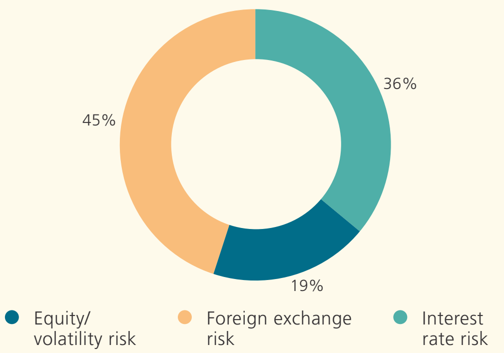
The VaR, stress and scenario testing results are reported to ALCO, the Executive Committee of the Board and the Board of Directors in accordance with the frequency that they meet.

RISK MANAGEMENT

Group daily diversified VaR – 2003



Group daily diversified VaR – 2002



The risks taken by the Group are measured against corresponding rewards to ensure that returns are commensurate with the risks taken. A risk-reward measure of Earnings-at-Risk (EaR) is used as a standard measurement of the risks against corresponding rewards across different products and business types. EaR is used as a benchmark in the setting of risk limits against prospective earnings.

Value-at-Risk (VaR)

The risks taken by the Group, as reflected by the level of VaR, are dependent on the level of exposure taken by the Group, and the level of market prices for the relevant period that is used in the computation of VaR.

The Group's daily diversified VaR, as at 31 December 2003, was $4.0 million and comprised mainly equity/volatility risk (44%), interest rate risk – including credit spread risk (38%), and foreign exchange risk (18%).

The Group's daily diversified VaR for 2003, averaging $3.1 million, ranged between a low of $2.0 million and a high of $6.8 million.

Group daily diversified VaR for 2003

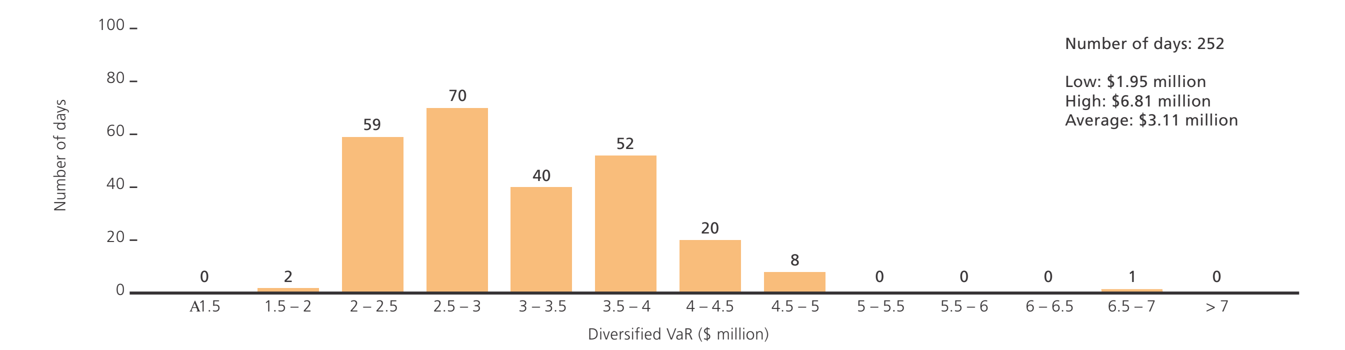
$ million	31.12.03	High	Low	Average
Equity/volatility	**2.6**	**3.8**	**0.6**	**1.7**
Foreign exchange	**1.1**	**5.8**	**0.6**	**1.4**
Interest rate	**2.3**	**2.8**	**1.2**	**1.8**
Diversification effect	**(1.9)**	**NM**	**NM**	**(1.9)**
Total VaR	**4.0**	**6.8**	**2.0**	**3.1**

Group daily diversified VaR for 2002

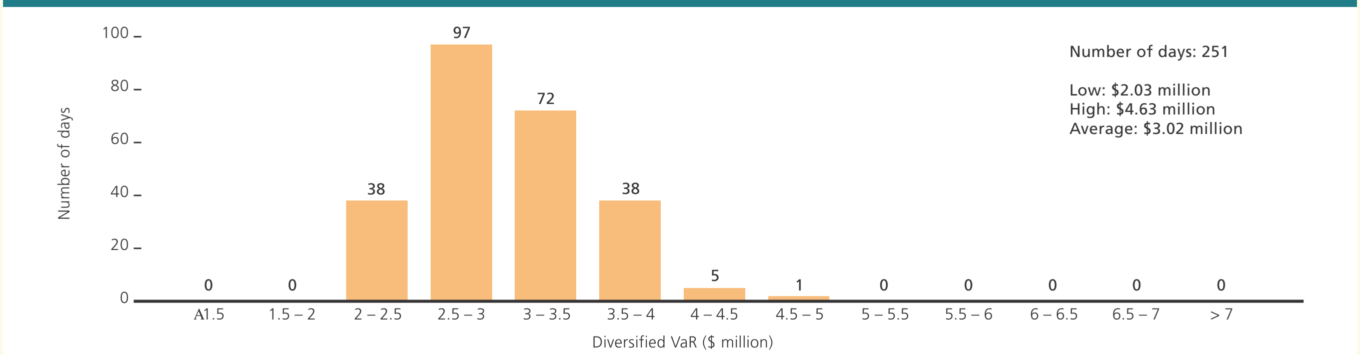
$ million	31.12.02	High	Low	Average
Equity/volatility	0.8	1.9	0.4	0.9
Foreign exchange	2.0	3.2	0.9	2.0
Interest rate	1.6	3.1	0.7	1.8
Diversification effect	(1.5)	NM	NM	(1.7)
Total VaR	2.9	4.6	2.0	3.0

NM denotes 'Not Meaningful' to compute diversification effect because the high and low may occur on different days for different risk types.

Group daily diversified VaR distribution for 2003

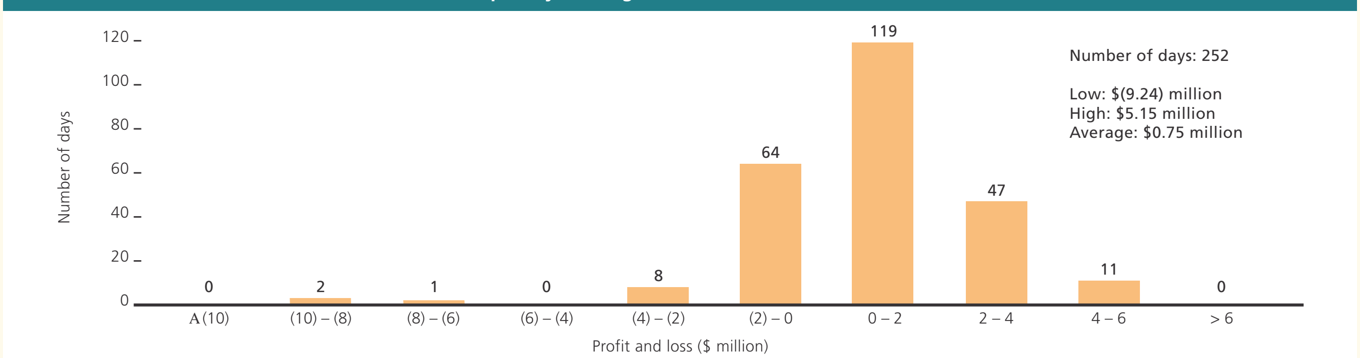


Group daily diversified VaR distribution for 2002

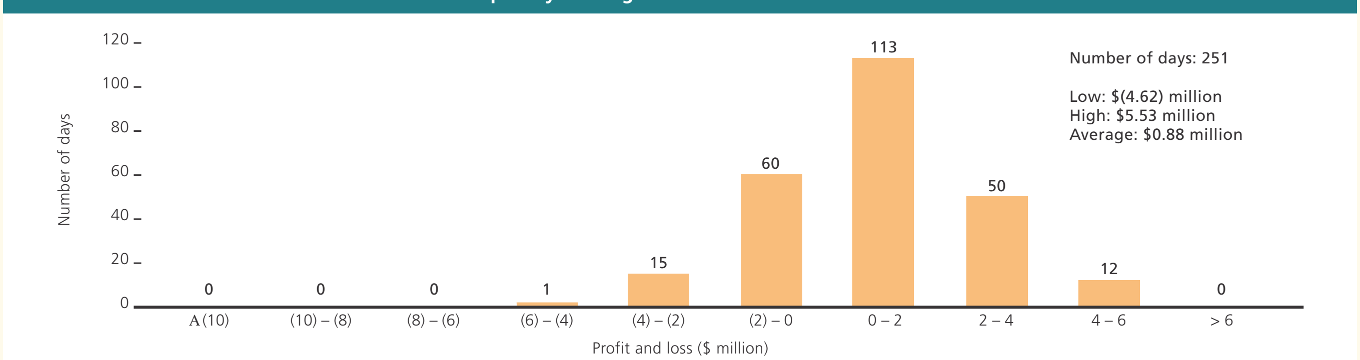


The Group's daily trading income for 2003, averaging $0.75 million, ranged between a low of $(9.24) million and a high of $5.15 million.

Group daily trading income distribution for 2003



Group daily trading income distribution for 2002



Operational Risk Management

Operational risk is defined as the potential loss arising from a breakdown in the Group's internal control or corporate governance that results in error, fraud, failure/delay to perform, or compromise of the Group's interests by employees. Operational risk also includes the potential loss arising from a major failure of computer systems and from disasters, for example, a major fire. Potential loss may be in the form of financial loss or other damages, for example, loss of reputation and public confidence that will impact the Group's credibility and ability to transact, maintain liquidity and obtain new business.

Operational risk is managed through a framework of policies, techniques and procedures as approved by the Management Committee (MC) under its delegated authority from the Board of Directors. The decisions of the MC and its monthly risk management reports are reviewed by the Executive Committee of the Board.

This framework of techniques and procedures, developed by Risk Management & Compliance sector – Operational Risk Management, encompasses the following:

- the building of Operational Risk Profiles (ORPs);
- conduct of Operational Risk Self Assessment (ORSA) based on the ORPs;
- development of an Operational Risk Action Plan (ORAP);
- the monitoring of Key Operational Risk Indicators (KORIs);
- the collection and analysis of risk events/loss data; and
- the process for monitoring and reporting operational risk issues.

The building of the ORPs involves risk identification, the assessment of inherent or absolute risks, as well as the identification and classification of management controls. The methodology provides the tool for the profiling of significant operational risks to which business and support units are exposed. These units then define the key management policies/procedures/controls that have been established to address the identified operational risks.

As part of the continual assessment, ORSA provides the business/support heads with an analytical tool to identify the wider operational risks, assess the adequacy of controls over these risks, and identify control deficiencies at an early stage so that timely action can be taken.

Where actions need to be taken, these are documented in the form of an ORAP for monitoring and reporting to top management.

KORIs are statistical data that are collected and monitored regularly by business units on an on-going basis for the early detection of potential areas of operational control weakness. Trend analysis is carried out to determine whether there are systemic issues to be addressed.

A Group policy and framework on incident reporting was established during the year to ensure consistent and accurate loss data collection. The loss database is being built and will facilitate the conduct of root cause analysis, thereby strengthening the operational risk management capability of the business units.

Included in the overall framework of operational risk is the disciplined product programme process. This process aims to ensure that the risks associated with each new product/service are identified, analysed and managed.

For the implementation of all online products and services, extra care and precautionary measures are taken to address and protect customers' confidentiality and interests. Clear instructions are also posted on the Group's website to advise and educate customers on the proper use and safekeeping of their access identification and passwords.

As part of the Group's comprehensive operational risk framework, an enhanced Group-wide Business Contingency Plan has been developed. In addition, in line with the increasing need to outsource internal operations in order to achieve cost efficiency, a Group policy has been established to regulate the outsourcing of services to third parties.

Risk transfer mechanisms, such as insurance, also form part of this framework. Identified operational risks with relatively high residual risk assessment ratings and new risks that are beyond the control of the Group will be scrutinised for insurability.

Legal risk is part of operational risk. Legal risk arises from inadequate documentation, legal or regulatory incapacity or insufficient authority of customers and uncertainty in the enforcement of contracts. This is managed through consultation with the Group's legal counsel and external counsel to ensure that legal advice is appropriately taken where necessary.

As part of preparations to comply with Basel II, the Group has started mapping all its business activities to the eight Business Lines as defined by the Basel Committee on Banking Supervision. The Group is expected to provide capital for operational risk using the Standardised Approach by 2007.

Group Compliance

The Group operates in an environment that is subject to a significant number of regulatory and operational compliance requirements. Risk Management & Compliance sector – Group Compliance is primarily responsible for ascertaining whether the appropriate control measures are in place for the Group to be reasonably assured that its businesses and operations are conducted in accordance with the relevant laws, regulations, policies and procedures. Where there are no explicit requirements, the Group adopts policies and procedures that are in line with best practices in the industry.

Group Compliance achieves its objectives through a team of dedicated Compliance Officers in key business lines and support units, including the Group's overseas branches and subsidiaries. These Compliance Officers monitor and enforce compliance with the relevant laws, regulations, policies and procedures in their respective areas, and report to the Head of Group Compliance who provides them with independent support and guidance to perform their tasks.

Group Compliance also spearheads the Group's efforts in ensuring that its businesses are not involved with money laundering and terrorist financing activities by issuing guidelines for business units to follow and by conducting reviews of compliance with these guidelines. Training sessions are also held to create and heighten staff awareness on the prevention of money laundering and terrorist financing activities.

During the year, there were many new developments in relation to the Securities and Futures Act and the Financial Advisers Act. A 'Customer Suitability Policy' was drawn up by Group Compliance to address compliance with these regulatory requirements. The Policy further includes a standard methodology to assess the risks of each investment product that the Group sells to its customers. The main intention is to guide customers in arriving at suitable investment decisions.