

## Credit and Country Risk Management

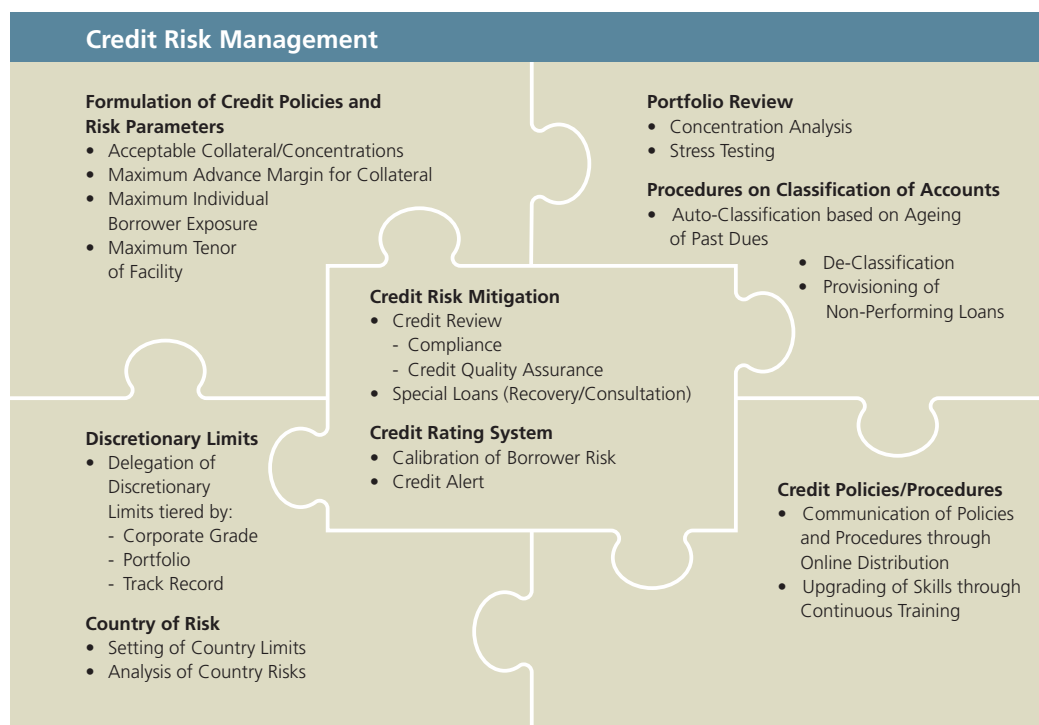
### Credit Risk

Counter-party and credit risk is defined as the potential loss arising from any failure by customers to fulfil 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 and acceptable structures, and collateral types.

Additional policies are 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 that an approving authority may participate in the credit deliberation if the 'Related Party' is a:

- company in 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 and a rigorous process is established to regularly review and report asset concentrations and portfolio quality so that risks are accurately assessed and properly monitored and approved. These cover large credit exposures by obligor group, collateral type, industry, product and 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 requirements 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.

The Group has a counter-party risk rating system in place to support consistent credit risk analysis for each counter-party. The risk rating system, together with the Group's plans to estimate recovery rates and exposures upon default, will enable it to better quantify potential credit losses in future.

### **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 18.6% and 30% of total loans and advances respectively.

Obligor groups are defined in accordance with MAS Notice 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 2002, 37.2% 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 were as follows:

By Industry Type (%)	Loans & Advances		Contingent Liabilities	
	2002	2001	2002	2001
Transport, storage and communication	<b>3.3</b>	3.6	<b>2.8</b>	3.5
Building and construction	<b>14.7</b>	15.1	<b>17.4</b>	22.8
Manufacturing	<b>8.6</b>	8.3	<b>10.3</b>	11.9
Non-bank financial institutions	<b>17.3</b>	16.8	<b>45.5</b>	30.6
General commerce	<b>10.0</b>	9.8	<b>13.2</b>	13.6
Professionals and private individuals	<b>15.0</b>	14.8	<b>2.7</b>	2.7
Housing loans	<b>22.2</b>	20.7	–	–
Others	<b>8.9</b>	10.9	<b>8.1</b>	14.9
Total (%)	<b>100.0</b>	100.0	<b>100.0</b>	100.0
Total gross loans (\$ million)	<b>62,339</b>	64,211	<b>8,682</b>	7,673

### Management of Performing Loans, Non-Performing Loans and Cumulative Provisions

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 MAS Notice 612. The Group also practises split classification of 'Substandard' into 'Substandard – Doubtful' and 'Substandard – Loss'. Interest income on all Non-Performing Loans is suspended and ceases to accrue. Such loans will remain classified until servicing of the account is 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. A credit is greater than 90 days past due, or the repayment schedule has been restructured.
Non-Performing: Substandard – Doubtful	A Substandard Loan that 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	A Substandard Loan that 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 applied. 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 whole outstanding loan is in doubt. The amount of specific provision to be made is based on the difference between the discounted cash flows or collateral value 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 unforeseen losses 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 provisions are made for each loan grade in the following manner:

Loan Classification	Recovery Expectation	Provision
Substandard	> 90% to 100%	10% to 25% of any unsecured loan outstanding
Doubtful	50% to 90%	50% to 75% of any unsecured loan outstanding
Loss	< 50%	100% of any unsecured loan outstanding

### Loan Interest

The fact that a loan is classified as doubtful does not remove the Group's entitlement to interest income; it merely casts doubt on whether the Group will be able to collect it. 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

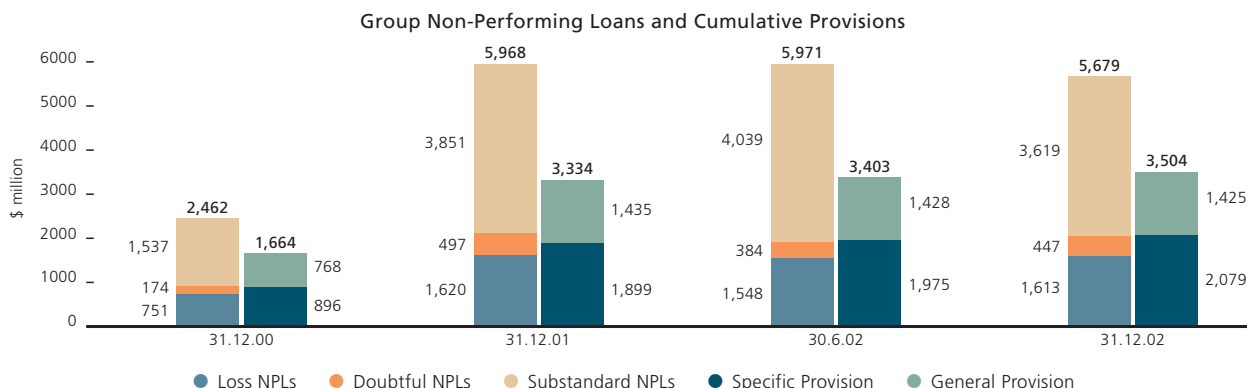
A classified account is written off where there is no realisable tangible collateral securing the account and all feasible avenues of recovery have been exhausted, or where the borrower and guarantors have been bankrupted, wound-up, proof of debt filed and all legal costs settled. Approval from MAS must be obtained before accounts that fall within the list of MAS Notice 606, such as director-related loans, can be written off.

### Group Non-Performing Loans (NPLs) and Cumulative Provisions

Group NPLs fell by \$289 million or 4.8% to \$5,679 million as at 31 December 2002, as compared to \$5,968 million as at 31 December 2001. Greater China 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 0.3% point, from 9.3% as at 31 December 2001 to 9.0% as at 31 December 2002. Of the total Group NPLs of \$5,679 million, \$3,619 million or 63.7% were in the Substandard category. The Group continues to adopt a cautious stance on the selection of credits in the face of global and regional economic uncertainties.

The Group's specific provision increased by \$180 million or 9.5% to \$2,079 million, as compared to \$1,899 million as at 31 December 2001. As a result, total cumulative specific and general provisions for the Group increased by \$170 million or 5.1%, from \$3,334 million as at 31 December 2001 to \$3,504 million as at 31 December 2002. General provision was \$1,425 million or 40.7% of total cumulative provisions as at 31 December 2002. The total cumulative provisions provided 61.7% cover against Group NPLs. For NPLs classified as Doubtful and Loss, the provision coverage stood at 170.1%.

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



Ratios (%)	31.12.02	30.6.02	31.12.01	31.12.00
NPLs*/Gross customer loans	<b>9.0</b>	9.5	9.3	7.8
Cumulative provisions/NPLs	<b>61.7</b>	57.0	55.9	67.6
Cumulative provisions/Doubtful & Loss NPLs	<b>170.1</b>	176.1	157.5	179.9
Cumulative provisions/Unsecured NPLs	<b>138.3</b>	132.2	136.6	136.6
Cumulative provisions*/Gross customer loans	<b>5.5</b>	5.4	5.2	5.2
General provision*/Gross customer loans (net of specific provision*)	<b>2.4</b>	2.4	2.3	2.5
NPLs/Total assets	<b>5.3</b>	5.5	5.2	3.7

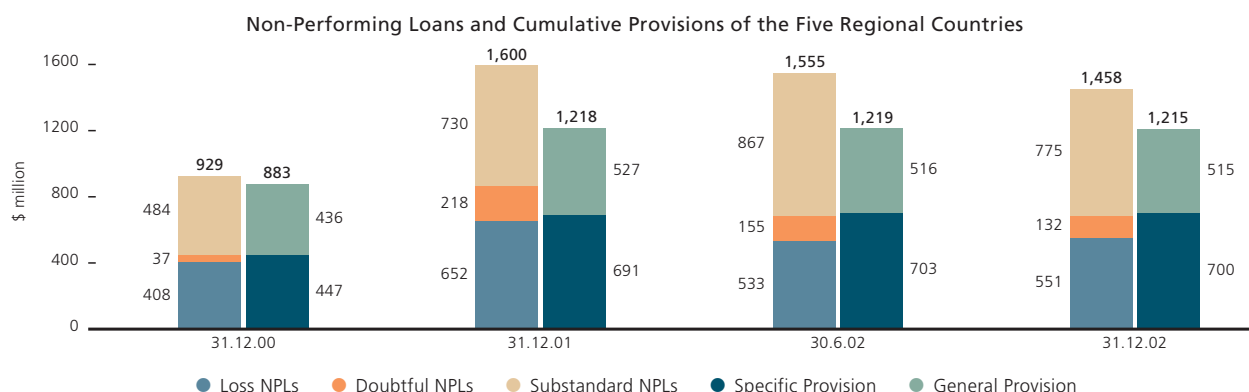
\* Excluding debt securities.

## Group NPLs and Cumulative Provisions of the Five Regional Countries

NPLs of the Five Regional Countries decreased further to \$1,458 million as at 31 December 2002 from \$1,600 million as at 31 December 2001. NPLs as a percentage of gross exposure to the region dropped to 8.5%, as compared to 8.9% as at 31 December 2001.

Cumulative specific and general provisions for the Five Regional Countries stood at \$1,215 million as at 31 December 2002. The cumulative provisions represented 83.3% of the total NPLs of the Five Regional Countries and 177.9% of the NPLs of the Five Regional Countries that were classified as Doubtful and Loss.

General provision was \$515 million (31 December 2001: \$527 million) against specific provision of \$700 million (31 December 2001: \$691 million).



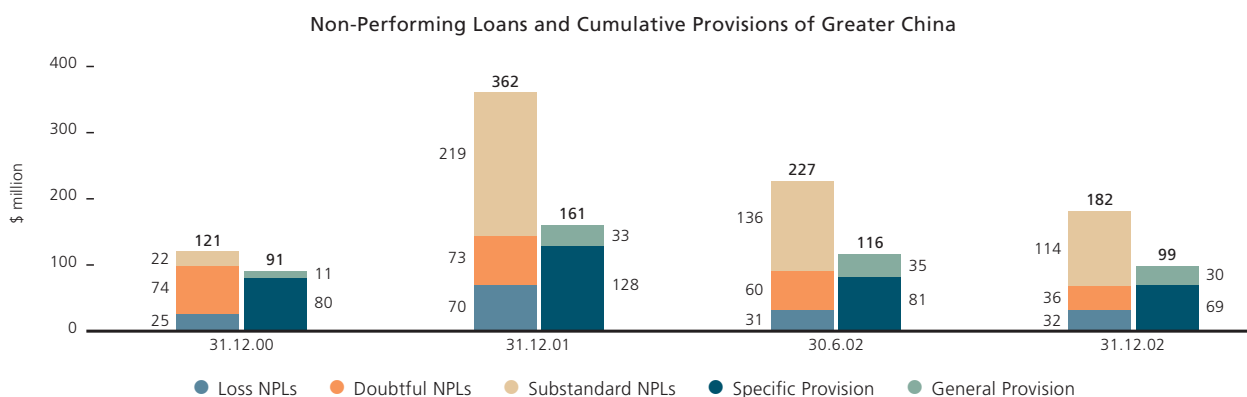
Ratios (%)	31.12.02	30.6.02	31.12.01	31.12.00
NPLs*/Gross customer loans	<b>17.0</b>	18.4	19.2	22.2
Cumulative provisions/NPLs	<b>83.3</b>	78.4	76.1	95.0
Cumulative provisions/Doubtful & Loss NPLs	<b>177.9</b>	177.2	140.0	198.4
Cumulative provisions*/Gross customer loans	<b>14.1</b>	14.4	14.7	21.1
General provision*/Gross customer loans (net of specific provision*)	<b>6.6</b>	6.7	7.0	11.7
NPLs/Gross exposure to the Five Regional Countries	<b>8.5</b>	8.8	8.9	9.1

\* Excluding debt securities.

### Group NPLs and Cumulative Provisions of Greater China

As at 31 December 2002, Group NPLs of Greater China fell by \$180 million or 49.7% to \$182 million from \$362 million as at 31 December 2001. Correspondingly, NPLs as a percentage of gross exposure to Greater China dropped to 2.4% as compared to 5.7% as at 31 December 2001.

In line with the lower NPLs, Group cumulative specific and general provisions for Greater China decreased to \$99 million as at 31 December 2002. The NPLs of Greater China were 54.4% covered by cumulative provisions. NPLs classified as Doubtful and Loss were 145.6% covered by cumulative provisions.



Ratios (%)	31.12.02	30.6.02	31.12.01	31.12.00
NPLs*/Gross customer loans	7.3	8.1	12.4	11.5
Cumulative provisions/NPLs	54.4	51.1	44.5	75.2
Cumulative provisions/Doubtful & Loss NPLs	145.6	127.5	112.6	91.9
Cumulative provisions*/Gross customer loans	4.0	4.1	5.5	8.6
General provision*/Gross customer loans (net of specific provision*)	1.2	1.3	1.2	1.1
NPLs/Gross exposure to Greater China	2.4	3.1	5.7	4.5

\* Excluding debt securities.

### Group NPLs by Region

The 4.8% drop in Group NPLs was primarily due to the lower NPLs of Greater China and of the Five Regional Countries. Singapore and the Five Regional Countries accounted for 69.3% and 25.7% of Group NPLs respectively.

\$ million	31.12.02	30.6.02	31.12.01	31.12.00
<b>Singapore</b>	<b>3,935</b>	4,017	3,819	1,354
Malaysia	943	984	1,028	528
Indonesia	156	169	169	119
Philippines	208	235	242	181
Thailand	144	159	151	101
South Korea	7	8	10	–
<b>Five Regional Countries</b>	<b>1,458</b>	1,555	1,600	929
<b>Greater China</b>	<b>182</b>	227	362	121
<b>Others</b>	<b>104</b>	172	187	58
<b>Group Total</b>	<b>5,679</b>	5,971	5,968	2,462

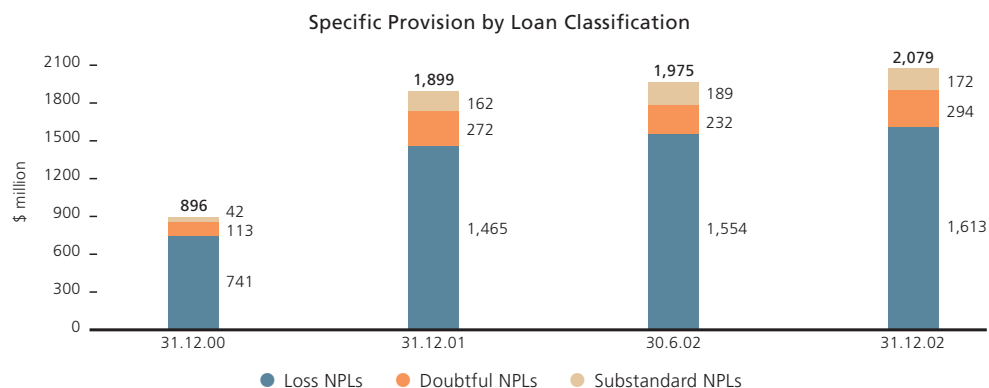
## Group NPLs by Industry

Group NPLs by industry were as follows:

Industry Type	31.12.02		30.6.02		31.12.01		31.12.00	
	Amount (\$ million)	As % of Gross Customer Loans	Amount (\$ million)	As % of Gross Customer Loans	Amount (\$ million)	As % of Gross Customer Loans	Amount (\$ million)	As % of Gross Customer Loans
Transport, storage and communication	124	6.0	99	4.9	99	4.3	66	9.3
Building and construction	843	9.2	1,108	11.5	1,163	12.0	243	6.8
Manufacturing	874	16.2	906	16.3	895	16.8	312	10.5
Non-bank financial institutions	1,029	9.5	1,076	9.8	1,022	9.5	447	9.0
General commerce	769	12.4	761	12.1	825	13.1	569	14.8
Professionals and private individuals	1,014	10.9	1,006	11.0	939	9.9	408	9.7
Housing loans	668	4.8	588	4.3	556	4.2	272	3.6
Others	294	5.3	404	7.6	445	6.4	145	3.8
Sub-Total	5,615	9.0	5,948	9.5	5,944	9.3	2,462	7.8
Debt securities	64		23		24		–	
Total	5,679		5,971		5,968		2,462	

## Group Specific Provision by Loan Classification

About 77.6% of specific provision made for expected loan losses was for 'Loss' accounts. The specific provision for each classified loan grade is shown in the following chart:





### Group Specific Provision by Region

The Group's specific provision was \$2,079 million as at 31 December 2002. Singapore and the Five Regional Countries accounted for 61.1% and 33.7% respectively of the Group's total specific provision.

\$ million	31.12.02	30.6.02	31.12.01	31.12.00
<b>Singapore</b>	<b>1,271</b>	1,153	1,037	353
Malaysia	<b>428</b>	427	439	242
Indonesia	<b>111</b>	117	88	87
Philippines	<b>72</b>	70	72	55
Thailand	<b>87</b>	87	88	63
South Korea	<b>2</b>	2	4	–
<b>Five Regional Countries</b>	<b>700</b>	703	691	447
<b>Greater China</b>	<b>69</b>	81	128	80
<b>Others</b>	<b>39</b>	38	43	16
<b>Specific Provision for the Group</b>	<b>2,079</b>	1,975	1,899	896
<b>General Provision for the Group</b>	<b>1,425</b>	1,428	1,435	768
<b>Total</b>	<b>3,504</b>	3,403	3,334	1,664

### Group Specific Provision by Industry

\$ million	31.12.02	30.6.02	31.12.01	31.12.00
Transport, storage and communication	<b>35</b>	27	28	29
Building and construction	<b>369</b>	353	336	104
Manufacturing	<b>398</b>	371	370	160
Non-bank financial institutions	<b>309</b>	317	308	145
General commerce	<b>309</b>	296	305	245
Professionals and private individuals	<b>329</b>	329	296	151
Housing loans	<b>143</b>	108	80	23
Others	<b>138</b>	151	161	39
Sub-Total	<b>2,030</b>	1,952	1,884	896
Debt securities	<b>49</b>	23	15	–
<b>Total</b>	<b>2,079</b>	1,975	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 and 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 payments 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 restructured during the year were as follows:

\$ million	Full Year 2002		First Half 2002		Full Year 2001		Full Year 2000	
	Amount	Specific Provision	Amount	Specific Provision	Amount	Specific Provision	Amount	Specific Provision
Substandard	<b>292</b>	<b>9</b>	63	2	176	8	17	1
Doubtful	<b>29</b>	<b>13</b>	10	5	115	42	–	–
Loss	<b>37</b>	<b>36</b>	16	16	65	57	4	4
Total	<b>358</b>	<b>58</b>	89	23	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. As at 31 December 2002, the ageing of NPLs was as follows:

Ageing (Days)	31.12.02		30.6.02		31.12.01		31.12.00	
	Amount (\$ million)	% of Total NPLs	Amount (\$ million)	% of Total NPLs	Amount (\$ million)	% of Total NPLs	Amount (\$ million)	% of Total NPLs
Current	<b>774</b>	<b>13.6</b>	618	10.3	925	15.5	177	7.2
≤ 90	<b>473</b>	<b>8.3</b>	505	8.5	874	14.6	280	11.4
91 to 180	<b>789</b>	<b>13.9</b>	774	13.0	547	9.2	220	8.9
≥ 181	<b>3,643</b>	<b>64.2</b>	4,074	68.2	3,622	60.7	1,785	72.5
Total	<b>5,679</b>	<b>100.0</b>	5,971	100.0	5,968	100.0	2,462	100.0

### Collateral Types

The majority of the classified loans are secured by properties. Properties are valued at forced sale value and such valuations are updated semi-annually. Other types of collateral include marketable securities such as listed stocks and shares, cash and deposits, and bankers' standby letters of credit (SBLCs).

As at 31 December 2002, 55.4% of total Group NPLs was secured by collateral as compared to 59.1% as at 31 December 2001.

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

\$ million	Properties	Marketable Securities	Cash and Deposits	Others	Total
<b>31.12.02</b>					
Singapore	2,067	86	36	135	2,324
Five Regional Countries	569	102	2	43	716
Greater China	61	2	–	–	63
Others	43	–	–	–	43
Total	2,740	190	38	178	3,146
<b>30.6.02</b>					
Singapore	2,232	105	19	105	2,461
Five Regional Countries	621	84	3	51	759
Greater China	68	5	1	–	74
Others	102	–	–	–	102
Total	3,023	194	23	156	3,396
<b>31.12.01</b>					
Singapore	2,282	136	14	64	2,496
Five Regional Countries	643	97	3	45	788
Greater China	109	11	–	11	131
Others	111	–	2	–	113
Total	3,145	244	19	120	3,528
<b>31.12.00</b>					
Singapore	770	37	9	34	850
Five Regional Countries	324	19	1	17	361
Greater China	9	10	–	–	19
Others	13	1	–	–	14
Total	1,116	67	10	51	1,244

### Secured/Unsecured NPLs

	31.12.02		30.6.02		31.12.01		31.12.00	
	Amount (\$ million)	% of Total NPLs	Amount (\$ million)	% of Total NPLs	Amount (\$ million)	% of Total NPLs	Amount (\$ million)	% of Total NPLs
Group NPLs								
Secured	3,146	55.4	3,396	56.9	3,528	59.1	1,244	50.5
Unsecured	2,533	44.6	2,575	43.1	2,440	40.9	1,218	49.5
Total	5,679	100.0	5,971	100.0	5,968	100.0	2,462	100.0

### **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.

Country exposure aggregates all exposures to a particular country, irrespective of whether such exposures are booked in or outside of that particular country. The exposure may be in the form of actual assets, such as investments, real estate, loan assets, contingent exposures like letters of credit and guarantees, other off-balance sheet exposures like foreign exchange contracts, 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 excluding facilities provided by the Group's branches/subsidiaries to the local incorporation or residual risk remaining within a country.

### **Setting of Country/Cross-Border Limits**

The review of country and cross-border risk by Risk Management & Compliance Sector – Country & Credit Risk Management is managed through a system of country and cross-border limits, based on ratings by external rating agencies and internal country credit grading. The latter uses various quantitative key indicators as well as qualitative factors relating to each country's economic, social and political circumstances. The scores are averaged and applied to a standard scale to obtain a numeric rating for the country. This numeric rating is then used to determine the appropriate limits based on a risk scale that assigns more stringent 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, the perceived economic strength and stability of the borrowing country, and the assessment of the Group's portfolio spread and risk appetite.

### **Mitigation of Country/Cross-Border Risk**

The Group's country and cross-border limits, aimed at avoiding concentration of transfer, economic or political risks, are regularly reviewed and exposure is reported to the Credit Committee at least four times a year. Limits may be reviewed and business strategies revised as and when 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 \$29.1 billion as at 31 December 2002, or 27% of Group total assets. Exposure (excluding contingent) reported is segregated by loans and advances to customers, balances due from banks incorporated in the country, investments and balances due from the government.

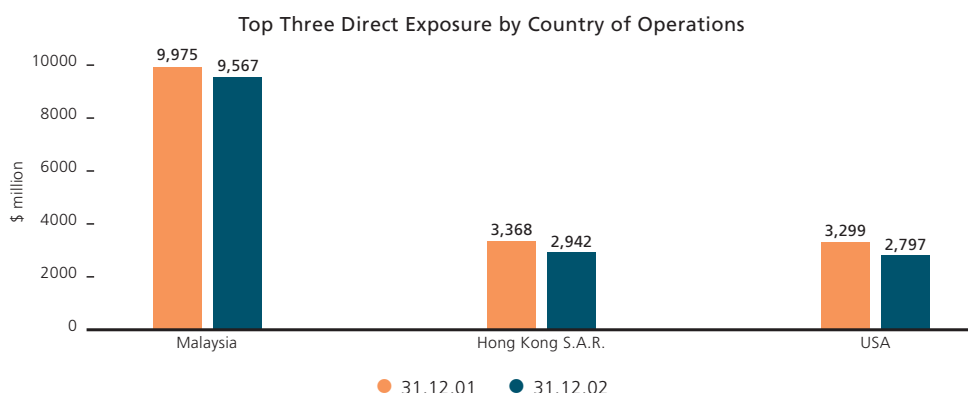
# Exposure to the Five Regional Countries, Greater China and Others

\$ million	Loans and Debt Securities			Investments	Total	Less: Loans/ Investments in Subsidiaries & Branches	Net Exposure		Contingent Liabilities
	Non-Bank	Government	Bank				Amount	% of Group Total Assets	
<b>Malaysia</b>									
<b>31.12.02</b>	<b>6,164</b>	<b>1,990</b>	<b>2,381</b>	<b>530</b>	<b>11,065</b>	<b>1,498</b>	<b>9,567</b>	<b>8.9</b>	<b>1,032</b>
30.6.02	6,014	2,648	2,229	615	11,506	1,286	10,220	9.4	872
31.12.01	6,493	2,188	2,571	740	11,992	2,017	9,975	8.8	864
31.12.00	3,165	993	1,118	470	5,746	579	5,167	7.8	476
<b>Indonesia</b>									
<b>31.12.02</b>	<b>444</b>	<b>127</b>	<b>106</b>	<b>74</b>	<b>751</b>	<b>50</b>	<b>701</b>	<b>0.6</b>	<b>67</b>
30.6.02	449	141	98	55	743	32	711	0.6	48
31.12.01	331	118	155	55	659	75	584	0.5	27
31.12.00	301	45	79	35	460	34	426	0.6	39
<b>Philippines</b>									
<b>31.12.02</b>	<b>254</b>	<b>225</b>	<b>44</b>	<b>10</b>	<b>533</b>	<b>31</b>	<b>502</b>	<b>0.5</b>	<b>56</b>
30.6.02	290	200	42	43	575	66	509	0.5	47
31.12.01	300	277	46	33	656	65	591	0.5	6
31.12.00	274	210	102	66	652	150	502	0.8	1
<b>Thailand</b>									
<b>31.12.02</b>	<b>1,178</b>	<b>1,177</b>	<b>112</b>	<b>200</b>	<b>2,667</b>	<b>194</b>	<b>2,473</b>	<b>2.3</b>	<b>285</b>
30.6.02	1,127	1,355	279	174	2,935	325	2,610	2.4	285
31.12.01	1,026	1,617	567	261	3,471	594	2,877	2.5	180
31.12.00	419	1,648	66	190	2,323	165	2,158	3.3	225
<b>South Korea</b>									
<b>31.12.02</b>	<b>45</b>	<b>591</b>	<b>1,354</b>	<b>95</b>	<b>2,085</b>	<b>12</b>	<b>2,073</b>	<b>1.9</b>	<b>253</b>
30.6.02	63	241	1,329	204	1,837	404	1,433	1.3	132
31.12.01	57	82	888	174	1,201	140	1,061	0.9	229
31.12.00	18	51	832	107	1,008	5	1,003	1.5	63
<b>Total Regional Countries</b>									
<b>31.12.02</b>	<b>8,085</b>	<b>4,110</b>	<b>3,997</b>	<b>909</b>	<b>17,101</b>	<b>1,785</b>	<b>15,316</b>	<b>14.2</b>	<b>1,693</b>
30.6.02	7,943	4,585	3,977	1,091	17,596	2,113	15,483	14.2	1,384
31.12.01	8,207	4,282	4,227	1,263	17,979	2,891	15,088	13.2	1,306
31.12.00	4,177	2,947	2,197	868	10,189	933	9,256	14.0	804
<b>Greater China</b>									
<b>31.12.02</b>	<b>2,482</b>	<b>233</b>	<b>4,311</b>	<b>632</b>	<b>7,658</b>	<b>2,536</b>	<b>5,122</b>	<b>4.8</b>	<b>504</b>
30.6.02	2,798	112	3,884	539	7,333	2,501	4,832	4.4	451
31.12.01	2,912	135	2,740	590	6,377	1,904	4,473	3.9	446
31.12.00	1,052	101	1,328	213	2,694	637	2,057	3.1	177
<b>Other OECD</b>									
<b>31.12.02</b>	<b>4,847</b>	<b>105</b>	<b>4,647</b>	<b>687</b>	<b>10,286</b>	<b>1,862</b>	<b>8,424</b>	<b>7.8</b>	<b>878</b>
30.6.02	4,151	51	3,645	547	8,394	1,010	7,384	6.8	908
31.12.01	4,652	49	6,102	604	11,407	1,307	10,100	8.9	734
31.12.00	2,207	32	6,358	138	8,735	262	8,473	12.8	584
<b>Others</b>									
<b>31.12.02</b>	<b>154</b>	<b>11</b>	<b>35</b>	<b>4</b>	<b>204</b>	<b>4</b>	<b>200</b>	<b>0.2</b>	<b>47</b>
30.6.02	161	11	36	5	213	4	209	0.2	22
31.12.01	187	12	44	1	244	4	240	0.2	27
31.12.00	7	4	19	–	30	9	21	–	22
<b>Grand Total</b>									
<b>31.12.02</b>	<b>15,568</b>	<b>4,459</b>	<b>12,990</b>	<b>2,232</b>	<b>35,249</b>	<b>6,187</b>	<b>29,062</b>	<b>27.0</b>	<b>3,122</b>
30.6.02	15,053	4,759	11,542	2,182	33,536	5,628	27,908	25.6	2,765
31.12.01	15,958	4,478	13,113	2,458	36,007	6,106	29,901	26.2	2,513
31.12.00	7,443	3,084	9,902	1,219	21,648	1,841	19,807	29.9	1,587

Included in investments as at 31 December 2002 was an amount of \$220.8 million relating to the dealing of debt and equity securities. The following table shows the breakdown of these investments:

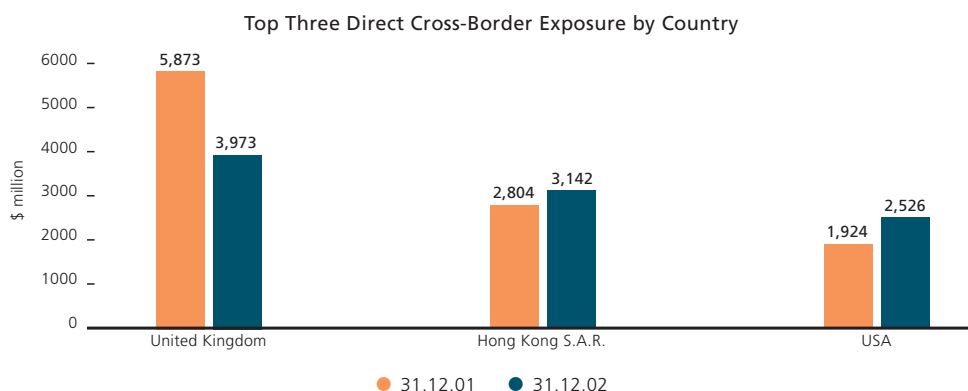
\$ million	Dealing	Non-Dealing	Investments
Malaysia	153	377	530
Indonesia	–	74	74
Philippines	1	9	10
Thailand	12	188	200
South Korea	8	87	95
<b>Five Regional Countries</b>	<b>174</b>	<b>735</b>	<b>909</b>
<b>Greater China</b>	<b>25</b>	<b>607</b>	<b>632</b>
<b>Other OECD</b>	<b>22</b>	<b>665</b>	<b>687</b>
<b>Others</b>	<b>–</b>	<b>4</b>	<b>4</b>
<b>Total</b>	<b>221</b>	<b>2,011</b>	<b>2,232</b>

At the country level, the largest exposure was to Malaysia where the Group has a long-standing presence – \$9.6 billion or 8.9% of Group total assets as at 31 December 2002. The second largest exposure was to Hong Kong S.A.R., amounting to \$2.9 billion or 2.7% of Group total assets.



## Group Cross-Border Exposure

As at 31 December 2002, total direct cross-border exposure to the countries where the Group has a presence amounted to \$18.9 billion. The top three direct cross-border exposure were United Kingdom, Hong Kong S.A.R. and USA. The exposure comprised substantially placements with banks due within one year.



# Cross-Border Exposure to the Five Regional Countries, Greater China and Others

	Loans and Debt Securities			Investments	Intra-Group	Total	% of Group Total Assets
\$ million	Non-Bank	Government	Bank				
<b>Malaysia</b>							
<b>31.12.02</b>	<b>130</b>	<b>35</b>	<b>471</b>	<b>341</b>	<b>1,393</b>	<b>2,370</b>	<b>2.2</b>
30.6.02	135	114	448	465	1,134	2,296	2.1
31.12.01	125	121	442	614	1,679	2,981	2.6
31.12.00	39	—	390	351	626	1,406	2.1
<b>Indonesia</b>							
<b>31.12.02</b>	<b>226</b>	<b>—</b>	<b>99</b>	<b>74</b>	<b>71</b>	<b>470</b>	<b>0.4</b>
30.6.02	245	1	86	55	54	441	0.4
31.12.01	133	—	108	56	41	338	0.3
31.12.00	99	—	78	34	34	245	0.3
<b>Philippines</b>							
<b>31.12.02</b>	<b>9</b>	<b>16</b>	<b>4</b>	<b>9</b>	<b>34</b>	<b>72</b>	<b>0.1</b>
30.6.02	26	16	5	43	39	129	0.1
31.12.01	18	17	10	33	36	114	0.1
31.12.00	17	1	16	66	86	186	0.3
<b>Thailand</b>							
<b>31.12.02</b>	<b>114</b>	<b>—</b>	<b>44</b>	<b>151</b>	<b>80</b>	<b>389</b>	<b>0.4</b>
30.6.02	123	—	37	157	253	570	0.5
31.12.01	136	—	45	231	508	920	0.8
31.12.00	79	—	36	156	44	315	0.5
<b>South Korea</b>							
<b>31.12.02</b>	<b>36</b>	<b>—</b>	<b>1,116</b>	<b>88</b>	<b>38</b>	<b>1,278</b>	<b>1.2</b>
30.6.02	57	—	600	185	443	1,285	1.2
31.12.01	49	—	595	165	170	979	0.9
31.12.00	17	—	643	107	7	774	1.2
<b>Total Regional Countries</b>							
<b>31.12.02</b>	<b>515</b>	<b>51</b>	<b>1,734</b>	<b>663</b>	<b>1,616</b>	<b>4,579</b>	<b>4.3</b>
30.6.02	586	131	1,176	905	1,923	4,721	4.3
31.12.01	461	138	1,200	1,099	2,434	5,332	4.7
31.12.00	251	1	1,163	714	797	2,926	4.4
<b>Greater China</b>							
<b>31.12.02</b>	<b>651</b>	<b>—</b>	<b>1,573</b>	<b>167</b>	<b>2,868</b>	<b>5,259</b>	<b>4.9</b>
30.6.02	788	—	1,240	170	2,963	5,161	4.7
31.12.01	753	—	1,102	170	2,232	4,257	3.7
31.12.00	325	—	1,175	219	669	2,388	3.6
<b>Other OECD</b>							
<b>31.12.02</b>	<b>420</b>	<b>7</b>	<b>5,901</b>	<b>337</b>	<b>2,238</b>	<b>8,903</b>	<b>8.3</b>
30.6.02	236	6	5,891	369	1,316	7,818	7.2
31.12.01	274	7	11,021	364	1,448	13,114	11.5
31.12.00	394	6	9,743	112	310	10,565	15.9
<b>Others</b>							
<b>31.12.02</b>	<b>—</b>	<b>—</b>	<b>4</b>	<b>4</b>	<b>101</b>	<b>109</b>	<b>0.1</b>
30.6.02	—	—	3	5	100	108	0.1
31.12.01	23	—	24	1	100	148	0.1
31.12.00	2	—	6	—	47	55	0.1
<b>Grand Total</b>							
<b>31.12.02</b>	<b>1,586</b>	<b>58</b>	<b>9,212</b>	<b>1,171</b>	<b>6,823</b>	<b>18,850</b>	<b>17.6</b>
30.6.02	1,610	137	8,310	1,449	6,302	17,808	16.3
31.12.01	1,511	145	13,347	1,634	6,214	22,851	20.0
31.12.00	972	7	12,087	1,045	1,823	15,934	24.0

### 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 the 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 Unit 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 calculated 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 during repricing periods and among the currencies in which the Group has positions. The table in Note 44(c) to the Financial Statements represents the Group's interest rate risk sensitivity based on repricing mismatches as at 31 December 2002. The Group had an overall positive interest rate sensitivity gap of \$7,488 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.

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 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 44 to 47.

## **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. 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 in accordance with 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 actions can be taken. On a tactical daily liquidity management level, Global Treasury – Asset Liability Management Unit 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 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 specified actions to create liquidity and continuous funding for the Group's operations.

Overseas banking branches and subsidiaries must comply with the 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.

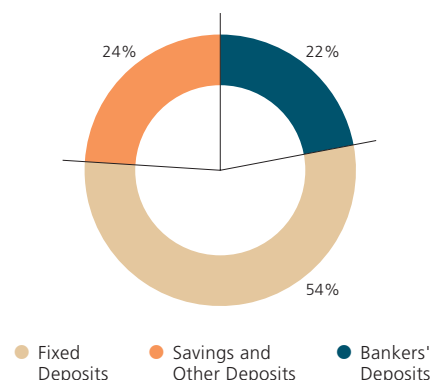
The table in Note 44(d) to the Financial Statements shows the maturity mismatch analysis of the Group's nearer and longer-term time bands relating to the cash inflows and outflows based on contractual classifications arising from business activities. The projected net cash outflow in the 'Up to 7 Days' time band comprises mainly customers' current accounts and savings accounts that are repayable on demand. However, when 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. These customer deposits amounted to \$67,919 million as at 31 December 2002 and accounted for 78% of total Group deposits. Bankers' deposits, on the other hand, amounted to \$19,302 million and formed the remaining 22% of total Group deposits. In terms of deposit mix, fixed deposits comprised the majority of the funding base at 54%, followed by savings and other deposits at 24%. Bankers' deposits are also used by the Group to capitalise on money market opportunities and to maintain a presence in the inter-bank money market.

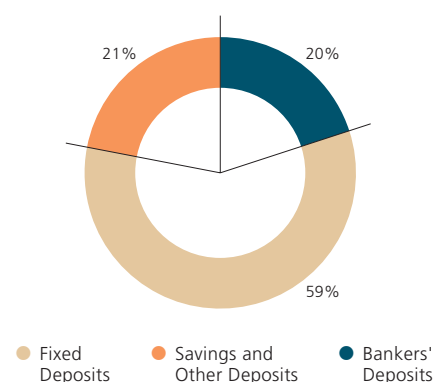
Sources of Deposits – 2002



Sources of Deposits

	2002	
	\$ 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

Sources of Deposits – 2001



Sources of Deposits

	2001	
	\$ million	%
Customer deposits		
Fixed deposits	54,419	59
Savings and other deposits	20,033	21
	74,452	80
Bankers' deposits	18,093	20
Total deposits	92,545	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 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 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 most 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 risk across financial products and portfolios.

Market risk is measured using VaR methodologies, namely, variance-covariance and historical simulation models based on 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 that 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 reasonableness of the VaR model, daily 'back testing' of VaR estimates are conducted against hypothetical and/or actual financial results. In this regard, the Group has, in 2002, established a Back Testing Policy, approved by ALCO, to formalise back testing guidelines and procedures.

To overcome the limitations of VaR as well as to complement VaR, stress and scenario tests are performed on the trading portfolios. This will 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 risk 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.

During the year under review, a Stress Testing Policy, approved by ALCO, was established to formalise stress testing guidelines and procedures. 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.

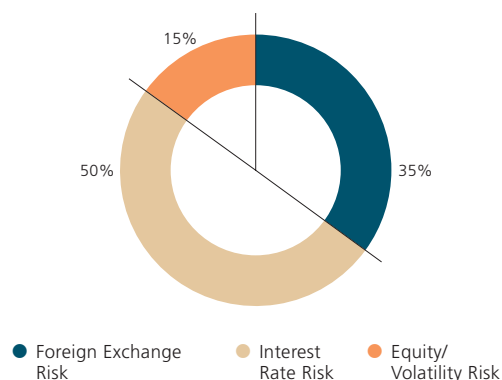
Some examples of stress tests that are performed include daily worst-case VaR based on the worst price changes experienced within the past 260 days and on historical events, for instance, the 1997/1998 Asian financial crisis, the 2000/2001 New Economy crisis and the June - August 2002 Investor Confidence crisis. Hypothetical sensitivity analysis includes parallel yield curve shifts for various currencies.

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

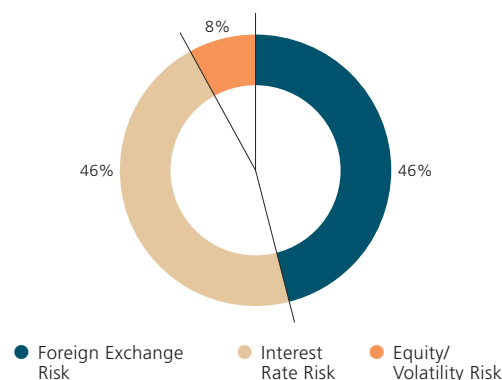
The VaR, stress and scenario testing results are reported to ALCO, the Executive Committee of the Board and the Board of Directors in accordance with the frequency that they meet.

## Risk Management

Group Daily VaR as at 31.12.02



Group Daily VaR as at 31.12.01\*



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 risk taken by the Group, as reflected by the level of VaR, is 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 VaR, as at 31 December 2002, was \$6.5 million and comprised mainly interest rate risk (50%), foreign exchange risk (35%) and equity/volatility risk (15%).

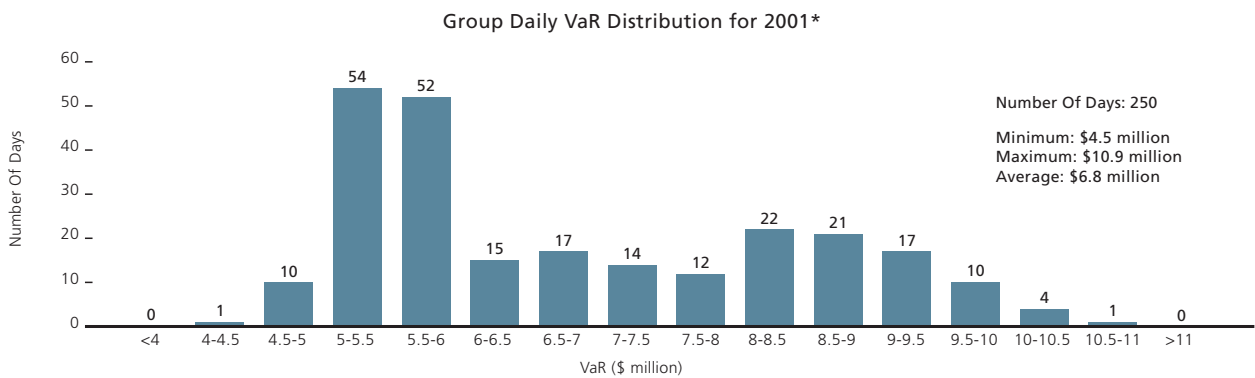
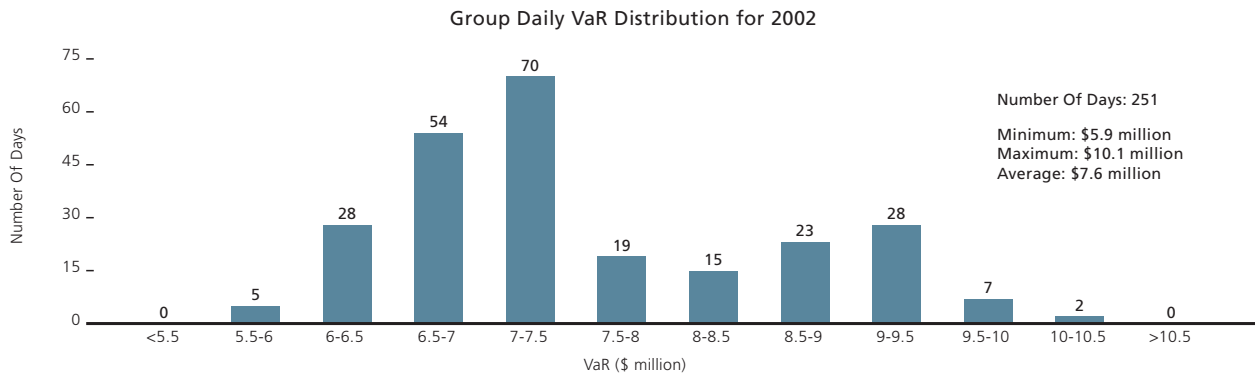
The Group's daily VaR for 2002, averaging \$7.6 million, ranged between a low of \$5.9 million and a high of \$10.1 million:

% of Total VaR	31.12.02	High	Low	Average
Interest rate	50	37	51	47
Foreign exchange	35	44	44	39
Equity/volatility	15	19	5	14
Total VaR (%)	100	100	100	100
Total VaR+ (\$ million)	6.5	10.1	5.9	7.6

% of Total VaR*	31.12.01	High	Low	Average
Interest rate	46	30	48	46
Foreign exchange	46	33	46	27
Equity/volatility	8	37	6	27
Total VaR (%)	100	100	100	100
Total VaR+ (\$ million)	5.6	10.9	4.5	6.8

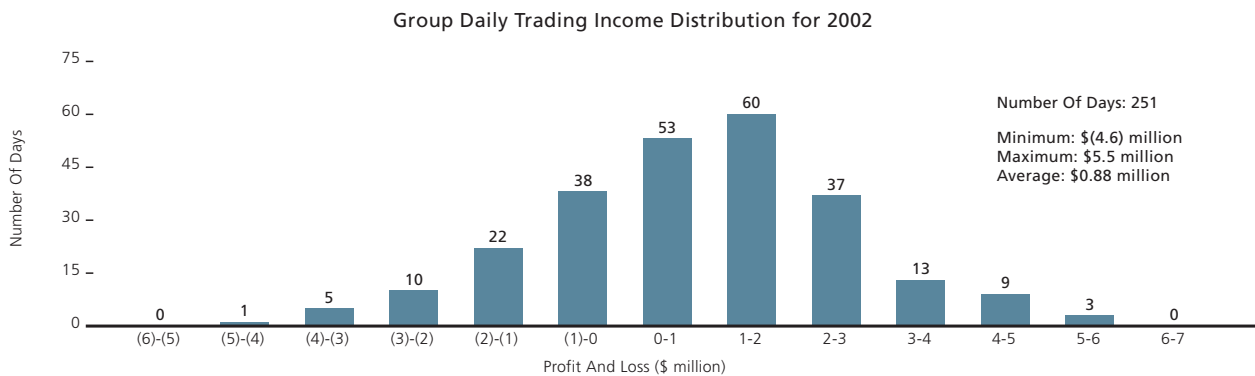
\* Excluding OUB Group.

+ Diversified across risk categories.



\* Excluding OUB Group.

The Group's daily trading income for 2002, averaging \$0.88 million, ranged between a low of \$(4.6) million and a high of \$5.5 million:



### **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 both natural and man-made disasters. 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 under its delegated authority from the Board of Directors. The decisions of the Management Committee and its monthly risk management reports are reviewed by the Executive Committee of the Board.

This framework of techniques and procedures encompasses the building of Operational Risk Profiles (ORPs), the conduct of Operational Risk Self Assessment (ORSA) based on the ORPs, the development of an Operational Risk Action Plan (ORAP), the monitoring of Key Operational Risk Indicators (KORIs), and the process for monitoring and reporting operational risk issues.

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. The building of the ORPs involves risk identification as well as the identification and classification of management controls.

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.

Complementing the framework are KORIs that are utilised and monitored on an on-going basis. Through regular monitoring and analysis of this data, areas of potential operational control weakness can be identified at an early stage.

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 before it is approved for launch.

For the implementation of all online products and services, extra 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.

### **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 ensuring that 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.

Besides ensuring the on-going compliance with local regulations, Group Compliance also oversaw the smooth delivery of the requirements under the US Patriot Act in 2002.

Effective from 1 October 2002, the new Financial Advisers Act 2001 (FAA) imposes stringent requirements on the provision of investment advice to customers, with particular emphasis on product disclosure and suitability of recommendation. The main intent of the FAA is to boost the professional standards of the financial advisory industry in Singapore and improve investor protection. In this regard, Group Compliance has worked with the relevant business units to develop a framework of guidelines and procedures that comply with the FAA requirements.